

ID		WBS	Task Name	Contact	Resource Initials	Duration
0			D0 Grid Production Computing Initiative	ahnlein		206 days
1		1	D0 Grid Production Architecture	AL		73 days
2		1.1	INPUT: Original architecture document v1.2	AL	AL	0 days
3		1.2	High-level Architecture Document: draft - APIs, component responsibilities	AL	ASB,AL	7 days
4		1.3	milestone: Draft High-level Architecture Document	AL	AL	0 days
5		1.4	High-level Architecture Document: Review	AL	RDK,ASB	5 days
6		1.5	High-level Architecture Document: Revised version	AL	AL	8 days
7		1.6	High-level Architecture Document: Approval - ASB	AL	RDK	4 days
8		1.7	High-level Architecture Document: Approval - VW	AL	RDK	1 day
9		1.8	MILE 7: D0 Grid Production Architecture document done	AL		0 days
10		2	Adjust Responsibilities among SamGrid, D0runjob, D0repro, automc tools	GG		206 days
11		2.1	INPUT: Review of D0runjob interface	PM	PM	0 days
12		2.2	Decouple D0runjob macro and SamGrid	GG		4 days
13		2.2.1	INPUT: Interface changes documented	GG	PM	0 days
14		2.2.2	Decouple D0runjob macro and SamGrid development work	GG	PL	1 day
15		2.2.3	Decoupling: MC Job Type: SamGrid Integration	GG	PM	3 days
16		2.3	Ability to store output at any stage on demand	GG		128 days
17		2.3.1	Store output from any stage: SamGrid development/integration	GG	PM	1 day
18		2.3.4	Store output from any stage: Production-level test	GG	JS	1 day
19		2.3.5	MILE 22: Store output from any stage of processing	GG		0 days
20		2.4	Start Prod via SAM Definition from Stage 2 of Prod: v1	GG		30 days
21		2.4.1	INPUT: Start Prod at Stage 2: D0runjob development	GG	PL	0 days
22		2.4.2	Start Prod at Stage 2: SamGrid development/integration	GG	PM	21 days
23		2.4.3	Start Prod at Stage 2: Production-level test	GG	JS	3 days
24		2.4.4	MILE 2: Start (MC) Production at Stage 2 - Working	GG		0 days
25		2.5	Error Recovery in Phased Processing	GG		35 days
26		2.5.1	Error Recovery: SamGrid development/integration	GG	PM	1 day
27		2.5.2	Error Recovery: Production-level test	GG	JS	5 days
28		2.5.3	milestone: Error Recovery in Phased Processing	GG		0 days
29		2.6	D0repro tools adapted to use Sam v7 request system	GG		128 days
30		2.6.1	D0repro tools adaptation: First 50% implementation	DW	DW	40 days
31		2.6.2	D0repro tools adaptation: Next 40% implementation	DW	DW	32 days
32		2.6.3	D0repro tools adaptation: Request impact on SamGrid and/or D0runjob	GG	RDK,GG	4 days
33		2.6.8	D0repro tools adaptation: Fix python interface to SAM request system	AL	SS	12 days
34		2.6.9	DEFER: D0repro tools adaptation: Final 10% implementation	DW	DW	0 days
35		2.6.4	D0repro tools adaptation: Use generic runjob interfaces in Samgrid for data processing App	GG	PM	14 days
36		2.6.10	D0repro tools adaptation: Define test dataset	GG	MD	1 day
37		2.6.5	DEFER: D0repro tools adaptation: Adjust D0runjob to use request system	GG	PL,PM	0 days
38		2.6.7	DEFER - MILE 14: D0repro-tools uses Sam v7 request system	GG		0 days
39		2.7	Resolve how to add production paths in future	GG		63 days
40		2.7.12	Generalization of Job Types according to I/O Characteristics: client side	GG	PM	16 days
41		2.7.1	Generalization of Job Types according to I/O Characteristics: execution side	GG	PM	6 days

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42		2.7.14	Generalization of Job Types according to I/O Characteristics: internal testing	GG	PM	4 days
43		2.7.13	D0repro tools/Generalization changes: Develop test	GG	PM	4 days
44		2.7.11	D0repro tools/Generalization changes: Production test	GG	MD	3 days
45		2.7.6	D0repro tools/Generalization changes: MC Production test	GG	JS	3 days
46		2.7.2	Resolve how to add production paths in future: Document	GG	PM	10 days
47		2.7.3	Resolve how to add production paths in future: D0 Approval	GG	ASB	1 day
48		2.7.4	MILE 20: How to add production paths in future - resolved	GG		0 days
49		2.8	Support testing v7/d0runjob/SamGrid functionality	GG		82 days
50		2.8.1	Survey current understanding of testing procedures	GG	RDK	6 days
51		2.8.2	D0GPCI FNAL testing meeting	GG		1 day
52		2.8.3	Testing responsibilities, procedures proposal	GG	GG	12 days
53		2.8.4	Agreement on Component and Integration testing	GG	GG,PL	8 days
54		2.8.5	Evaluate how D0runjob should set up WN environment	GG	AB2	4 days
55		2.8.6	D0runjob sets up its own environment	GG	PL	6 days
56		2.8.7	Evaluate and sign-off on test facilities and procedures	GG	/,PL,DW,JS	5 days
57		2.8.8	MILE 18: Support testing v7/d0runjob/SamGrid functionality	GG		0 days
58		2.9	Start Prod via SAM Definition from Stage 2 of Prod: v2	GG		7 days
59		2.9.1	Start Prod at Stage 2: SamGrid notification=all bug fix	GG	PM	5 days
60		2.9.2	Start Prod at Stage 2: Production-level re-test	GG	JS	2 days
61		2.9.3	milestone: Start Prod at Stage 2 Ready for Production Release	GG		0 days
62		2.10	Evaluate Extensions to Development	GG		6 days
63		2.10.1	D0runjob/SamGrid Decoupling: Skim Job Type	GG		0 days
64		2.10.3	D0runjob/SamGrid Decoupling: Merge Job Type	GG		0 days
65		2.10.4	Start Prod via SAM Definition from Stage 3+ of Prod	GG		0 days
66		2.10.5	Fabric interface no longer dependent on Job Type	GG		0 days
67		2.10.6	All merge code into D0runjob	PL		0 days
68		2.10.7	Write evaluation of extensions to development	GG	GG	6 days
69		2.11	MILE 26: Tools have defined API, testing responsibilities	GG		0 days
70		3	Transition Operations Support from SamGrid Dev to Run2 Ops	GG,AL		201 days
71		3.1	Operations Documentation	AL		176 days
72		3.1.1	Data Queues Doc	AL		67 days
73		3.1.1.1	INPUT: Data Queues Doc: Recent Draft	AL	AB2	0 days
74		3.1.1.2	Data Queues Doc: Feed-back, update	AL	AB3,AB2	5 days
75		3.1.1.3	Data Queues Doc: Approve	AL	AL	5 days
76		3.1.1.4	Data Queues Doc: Integrate into SamGrid Documentation	AL	DZ,AL	1 day
77		3.1.1.5	milestone: Data Queues Doc: Completed	AL		0 days
78		3.1.2	Forwarding Node Installation Doc	AL		68 days
79		3.1.2.1	INPUT: Fwd Node Install Doc: Recent Draft	AL	DZ	0 days
80		3.1.2.2	Fwd Node Install Doc: Hardware prep attempt	AL	SS	25 days
81		3.1.2.3	Fwd Node Install Doc: Feed-back	AL	SS	5 days
82		3.1.2.4	Fwd Node Install Doc: Integrate Dehong and Steve's documents	AL	DZ,SS	5 days
83		3.1.2.5	Fwd Node Install Doc: Approve	AL	AL	1 day

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84	✓	3.1.2.6	Fwd Node Install Doc: Integrate into SamGrid Installation Manual	AL	DZ	2 days
85	✓	3.1.2.7	milestone: Fwd Node Install Doc: Completed	AL		0 days
86	✓	3.1.3	Integrating SRM Storage with SAM Doc	GG		7 days
87	✓	3.1.3.1	SRM with SAM Doc: Integrate into SamGrid Documentation	GG	AB2	7 days
88	✓	3.1.3.2	milestone: SRM with SAM Doc: Completed	GG		0 days
89	📅	3.1.4	Operations Policies Doc	AL		131 days
90	✓	3.1.4.1	Operations Policies doc: Draft	AL	AL	1 day
91	✓	3.1.4.2	Operations Policies doc: Review	AL	GG,RDK	5 days
92	✓	3.1.4.3	Operations Policies doc: Revised draft	AL	AL	12 days
93	✓	3.1.4.4	Operations Policies doc: Review, agreement	AL		7 days
94	✓	3.1.4.5	Operations Policies doc: Review version v1.0	AL	AL	8 days
95	✓	3.1.4.8	Operations Policies doc: Stakeholder Review	AL	RDK	9 days
96		3.1.4.9	Operations Policies doc: Release version v1.1	AL	AL	4 days
97		3.1.4.6	Operations Policies doc: Approve - CD, D0	AL	ASB,RDK	3 days
98		3.1.4.7	MILE 13: Grid Production Operations Policies doc done	AL		0 days
99		3.1.5	milestone: Operations Documentation completed	AL		0 days
100	✓	3.2	Operations Reduction and Transfer Planning	GG,AL		68 days
101	✓	3.2.1	Current Operations Description	GG		33 days
102	✓	3.2.1.1	INPUT: Write-up of operations issues	GG	GG	0 days
103	✓	3.2.1.2	Current Operations description: draft - level and causes	GG	GG	4 days
104	✓	3.2.1.3	Current Operations description: Review	GG	PM,RDK,AL	5 days
105	✓	3.2.1.4	Current Operations description: Revised version	GG	GG	2 days
106	✓	3.2.1.5	Current Operations description: Approve	GG	ASB	1 day
107	✓	3.2.1.6	milestone: Current Operations description	GG		0 days
108	✓	3.2.2	Future Operations Staffing Doc	AL		13 days
109	✓	3.2.2.1	INPUT: FY08 REX budget determined	RS	RS,AL	0 days
110	✓	3.2.2.2	Future Operations description: draft - acceptable load level and activities	AL	RS,AL	6 days
111	✓	3.2.2.3	Future Operations description: Review	AL	S,RDK,ASB	5 days
112	✓	3.2.2.4	Future Operations description: Approve	AL	ASB	2 days
113	✓	3.2.2.5	milestone: Future Operations description	AL		0 days
114	✓	3.2.3	Operations Reduction Plan: "Road To Operations"	GG		60 days
115	✓	3.2.3.1	INPUT: Operations Reduction plan: Monitoring, Alarms proposal	GG	AB2	0 days
116	✓	3.2.3.2	Operations Reduction plan: Overall draft	GG	GG	16 days
117	✓	3.2.3.3	Operations Reduction plan: Review	GG	SB,RDK,AL	5 days
118	✓	3.2.3.4	Operations Reduction plan: Revised version	GG	GG,AB2	10 days
119	✓	3.2.3.5	MILE 4: Operations Reduction plan: Working plan ready	GG		0 days
120	✓📅	3.2.3.6	Operations Reduction plan: Coordinate w/FEF	GG	GG	10 days
121	✓	3.2.3.7	Operations Reduction plan: Approve - CD, D0	GG	ASB,RDK	2 days
122	✓📅	3.2.3.8	milestone: Operations Reduction plan completed	GG		0 days
123	✓	3.2.4	milestone: Operations Reduction and Transfer Planning completed	GG		0 days
124	✓	3.3	Operations Transfer Execution	GG,AL		95 days
125	✓📅	3.3.1	Operations Transfer: Phase 1 (Checklist)	GG,AL		18 days

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126	✓	3.3.1.1	SamGrid Requests to Sam Issue Tracker	GG,AL		2 days
127	✓	3.3.1.1.1	Request SamGrid Users to open tickets	GG,AL	GG	1 day
128	✓	3.3.1.1.2	Inform Sam shifters about handling SamGrid Requests	GG,AL	AL	1 day
129	✓	3.3.1.1.3	milestone: SamGrid Requests to Sam Issue Tracker	GG,AL		0 days
130	✓	3.3.1.2	SamGrid Operations Checklist	GG		8 days
131	✓	3.3.1.2.1	Write-up checklist	GG	PM	1 day
132	✓	3.3.1.2.2	Review checklist	GG	GG,AL	3 days
133	✓	3.3.1.2.3	Revise checklist	GG	PM	3 days
134	✓	3.3.1.2.4	Checklist training, trial run	GG	PM,AL	0.5 days
135	✓	3.3.1.2.5	Fine-tune checklist per feed-back	GG	PM	0.5 days
136	✓	3.3.1.2.6	milestone: SamGrid Operations Checklist Transferred	GG		0 days
137	✓	3.3.1.3	Adapt Operations Checklist to Ops-oriented Format	AL	AL,GG	9 days
138	✓	3.3.1.3.1	Adapt to Ops-oriented format	AL	AL	5 days
139	✓	3.3.1.3.2	Review, sign-off by GG, AB2	AL	GG,AB2	4 days
140	✓	3.3.1.3.3	milestone: Adapt Operations Checklist to Ops-oriented Format	AL		0 days
141	✓	3.3.1.4	MILE 3: Manual Checklist - Phase 1/4 of Ops Transfer done	GG,AL		0 days
142	✓	3.3.2	Operations Transfer: Phase 2 (Fwd Nodes, Stations)	GG,AL		15 days
143	✓	3.3.2.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
144	✓	3.3.2.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
145	✓	3.3.2.3	MILE 5: Fwd Nodes - Phase 2/4 of Ops Transfer done	GG,AL		0 days
146	✓	3.3.3	Operations Transfer: Phase 3 (Durable Locations, Queueing Nodes)	GG,AL		15 days
147	✓	3.3.3.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
148	✓	3.3.3.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
149	✓	3.3.3.3	MILE 10: Queueing,Durable Nodes - Phase 3/4 of Ops Transfer done	GG,AL		0 days
150	✓	3.3.4	Operations Transfer: Phase 4 (Jim Client, plus all else)	GG,AL		15 days
151	✓	3.3.4.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
152	✓	3.3.4.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
153	✓	3.3.4.3	MILE 21: Jim_Client+ - Phase 4/4 of Ops Transfer done	GG,AL		0 days
154	✓	3.3.5	milestone: Operations Transfer nominally completed	GG,AL		0 days
155	✓	3.4	VDT Version Migration	GG		63 days
156	✓	3.4.1	New VDT: VDT-oriented Testbed setup	GG	PM	8 days
157	✓	3.4.2	New VDT: VDT-oriented Testbed resetup	GG	PM	2 days
158	✓	3.4.3	New VDT: software adaptation and deployment	GG	PM	26 days
159	✓	3.4.5	MILE 9: SamGrid migrated to new VDT version	GG		0 days
160		3.5	Operations Reduction Execution: "Road To Operations"	GG		156 days
161		3.5.1	Reinstall key machines with standard configuration	GG		137 days
162	✓	3.5.1.1	Reach agreement among groups involved (by Sep 14)	GG	GG,AL	8 days
163		3.5.1.2	Reinstall Forwarding Nodes with standard configuration	GG,AL		137 days
164	✓	3.5.1.2.1	Define standard fwd node machine configuration	GG	PM	2 days
165		3.5.1.2.2	Reinstall Forwarding Nodes: Oct 22- Nov 20	GG		127 days
166	✓	3.5.1.2.2.1	Admins procure HW parts for all fwd nodes	GG	FEF	16 days
167	✓	3.5.1.2.2.2	Reinstall Forwarding Node 1 (w/Sam Station)	GG		20 days

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168	3.5.1.2.2.2.1	Admins configure candidate fwd node (by Oct 22)	GG	FEF	5 days
169	3.5.1.2.2.2.2	Developers install and test candidate fwd node (by Fri Oct 26)	GG	PM	3 days
170	3.5.1.2.2.2.4	Adjust current software to use standard location as default	GG	PM	1 day
171	3.5.1.2.2.2.3	Adjust current installation instructions	GG	PM	1 day
172	3.5.1.2.2.2.5	REX ops re-installs on candidate machine	AL	SS	1 day
173	3.5.1.2.2.2.7	Admins and REX ops configure production fwd node	AL	FEF,SS	1 day
174	3.5.1.2.2.2.6	Switch candidate machine and d0srv047 (fwd + station) (Nov 6)	AL	SS	1 day
175	3.5.1.2.2.2.9	Diagnose, resolve, document 32-bit/64-bit compatibility issues	GG,AL	PM,SS	4 days
176	3.5.1.2.2.2.8	MILE 11: Forwarding Node w/Sam Station Reinstalled with std config	GG		0 days
177	3.5.1.2.2.3	INPUT: Test of fail-over in production environment	GG	PM	0 days
178	3.5.1.2.2.4	Reinstall Forwarding Node 2	AL		28 days
179	3.5.1.2.2.4.1	REX ops drains and take production fwd node offline (d0srv15): NO-OP	AL	SS	1 day
180	3.5.1.2.2.4.2	REX ops installs software on new production fwd node (samgfw02)	AL	SS	2 days
181	3.5.1.2.2.4.6	REX ops tests new production fwd node (samgfw02)	AL	SS	5 days
182	3.5.1.2.2.4.7	Rex ops and SamGrid Dev resolve perl/VDT issues revealed in fwd node test	AL	SS,PM	8 days
183	3.5.1.2.2.4.8	REX ops retests new production fwd node (samgfw02)	AL	SS	6 days
184	3.5.1.2.2.4.3	Put new fwd node in production, drain old node (samgfw02, old: d0srv15)	AL	SS	1 day
185	3.5.1.2.2.4.5	milestone: verified fwd node configuration and procedure	AL		0 days
186	3.5.1.2.2.5	Reinstall Forwarding Node 3	AL		45 days
187	3.5.1.2.2.5.2	REX ops installs software on new production fwd node (samgfw03)	AL	SS	1 day
188	3.5.1.2.2.5.5	REX ops tests new production fwd node (samgfw03)	AL	SS	2 days
189	3.5.1.2.2.5.7	REX ops follows up on samgfw03 stability concerns with FEF	AL	SS	18 days
190	3.5.1.2.2.5.8	REX ops re-installs software on Fwd Node 3	AL	SS	3 days
191	3.5.1.2.2.5.9	REX ops re-tests Fwd Node 3	AL	SS	10 days
192	3.5.1.2.2.5.10	Deploy Condor patch to Fwd Nodes 1-3	AL	SS	3 days
193	3.5.1.2.2.5.3	Put new fwd node in production, drain old node (samgfw03, old: d0srv66)	AL	SS	3 days
194	3.5.1.2.2.5.11	MILE 15: OSG Fwd nodes reinstalled with std config	GG		0 days
195	3.5.1.2.2.8	Organize activities to prepare for LCG fwd node migration	GG	GG	13 days
196	3.5.1.2.2.11	Reinstall LCG/Germany/Wuppertal Forwarding Node	AL		21 days
197	3.5.1.2.2.11.15	Site ops repairs failed disk, brings node back online	AL	LCG	6 days
198	3.5.1.2.2.11.20	REX ops installs software on LCG/Germany fwd node: trial 1	AL	SS	4 days
199	3.5.1.2.2.11.21	Evaluate options for proceeding: std config, less space, old restore, etc.	AL	AL,ASB	2 days
200	3.5.1.2.2.11.16	REX ops installs software on LCG/Germany fwd node: trial 2	AL	SS	3 days
201	3.5.1.2.2.11.25	DEFER: Stop re-installation work on unsupported Wuppertal node	AL		0 days
202	3.5.1.2.2.10	Reinstall LCG/UK/Imperial College Forwarding Node	AL		0 days
203	3.5.1.2.2.10.12	DEFER: DO not start re-installation of unreachable IC node	AL		0 days
204	3.5.1.2.3	milestone: Forwarding nodes reinstalled with standard configuration	GG		0 days
205	3.5.1.3	Reinstall Queuing Node with standard configuration	GG,AL		70 days
206	3.5.1.3.1	Define standard queuing node machine configuration	GG	PM	5 days
207	3.5.1.3.2	Reinstall Queuing Node: Oct 19 - Nov 6	GG		21 days
208	3.5.1.3.2.1	Admins procure HW parts for samgrid-like node (job queuing, broker, web server)	GG	FEF	12 days
209	3.5.1.3.2.2	Admins configure test instance of samgrid-like node	GG	FGS	2 days

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210	✓	3.5.1.3.2.3	Developers install and test samgrid-like node (by Wed Nov 7)	GG	PM	2 days
211	✓	3.5.1.3.2.4	Adjust current installation instructions	GG	PM	1 day
212	✓	3.5.1.3.2.5	Adjust current software to use standard location as default	GG	PM	1 day
213	✓	3.5.1.3.2.6	Admins configure production samgrid-like node	AL	FGS	1 day
214	✓	3.5.1.3.2.7	REX ops installs queuing software on production samgrid-like node	AL	SS	1 day
215	✓	3.5.1.3.2.9	Dev ops installs web server software on production samgrid-like node	AL	PM	1 day
216	✓	3.5.1.3.2.8	REX ops integrates new samgrid-like node into production system	AL		1 day
217	✓	3.5.1.3.2.8.1	Replace samgrid.fnal.gov (Dec 4 downtime, prefer Nov 6 downtime)	AL	SS	1 day
218	✓	3.5.1.3.3	MILE 12: Queuing node reinstalled with std config	GG		0 days
219	✓	3.5.1.3.4	Diagnose job history incompatibility issues and create migration plan	GG	PM,GG	3 days
220	✓	3.5.1.3.11	Prepare for migration from mixed old/new samgrid nodes to new node use only	GG	PM,GG	5 days
221	✓	3.5.1.3.5	Migrate MC Prod from mixed old/new samgrid nodes to new node use only	GG	JS	23 days
222	✓	3.5.1.3.6	Migrate Prod from mixed old/new samgrid nodes to new node use only	GG	MD	7 days
223	✓	3.5.1.3.12	Turn off old samgrid.fnal.gov (samgsrv1) - warn,do,check	GG	GG	6 days
224	✓	3.5.1.3.8	milestone: Migration to exclusive use of new samgrid node completed	GG		0 days
225	✓	3.5.1.4	Reinstall Durable Locations with standard configuration	GG,AL		13 days
226	✓	3.5.1.4.1	Define standard durable location machine configuration	GG	PM	9 days
227	✓	3.5.1.4.2	Reinstall Durable Locations: Nov 9 - Nov 28	GG		4 days
228	✓	3.5.1.4.2.1	MOOT: Admins procure HW parts(?) for test instance of durable location node	GG	FEF	0 days
229	✓	3.5.1.4.2.2	MOOT: Admins configure test instance of durable location node (by Fri Nov 9)	GG	FEF	0 days
230	✓	3.5.1.4.2.3	MOOT: Developers install and test durable location node (by Fri Nov 23)	GG	PM	0 days
231	✓	3.5.1.4.2.4	Durable Locations: Adjust current installation instructions	GG	PM	1 day
232	✓	3.5.1.4.2.5	MOOT: Adjust current software to use standard location as default	GG	PM	0 days
233	✓	3.5.1.4.2.6	MOOT: REX ops re-installs on test machine	AL	SS	0 days
234	✓	3.5.1.4.2.7	REX ops reconfigures existing durable locations	AL		0 days
235	✓	3.5.1.4.2.7.1	MOOT: Stop tmb upload to d0srv063; REX ops reinstalls durable location	AL	SS	0 days
236	✓	3.5.1.4.2.7.2	MOOT: Stop tmb upload to d0srv065; REX ops reinstalls durable location	AL	SS	0 days
237	✓	3.5.1.4.3	MILE 17: Durable Locations reinstalled with std config	GG		0 days
238		3.5.1.5	milestone: Standard configuration defined and key machines reinstalled	GG		0 days
239		3.5.8	Create SamGrid Test Stand v1.0	AL		41 days
240	✓	3.5.8.7	REX ops and Run2Sys agree on/setup hardware config of test stand nodes	AL	SS	6 days
241	✓	3.5.8.1	REX ops installs software on test OSG fwd node (d0srv15)	AL	SS	2 days
242	✓	3.5.8.8	REX ops installs software on 2nd test fwd node (d0srv47)	AL	SS	3 days
243		3.5.8.9	REX ops tests fwd nodes in test stand - just 1 of 2 needs to work	AL	SS	13 days
244		3.5.8.2	Admins fix disk on test queue node (old samgrid)	AL	FEF	10 days
245		3.5.8.5	REX ops installs software on test queue node (old samgrid)	AL	SS	5 days
246		3.5.8.3	Trial use of SamGrid test stand v1.0	AL	SS	5 days
247		3.5.8.4	milestone: SamGrid test stand completed	AL		0 days
248		3.5.2	Automate routine maintenance operations	GG		74 days
249		3.5.2.1	Automatic clean up of job queues	GG		62 days
250	✓	3.5.2.1.5	Dev tools to auto-clean up OSG job queue in samgrid_util (Forwarding Nodes)	GG	PM	2 days
251	✓	3.5.2.1.2	Deploy/observe tools for auto-clean up of OSG job queue (Fwd Nodes 1,2 re-installed)	GG	PM,SS	4 days

ID		WBS	Task Name	Contact	Resource Initials	Duration
252	✓	3.5.2.1.9	Dev tools to auto-clean up SamGrid job queue in samgrid_util CVS (Queuing Node)	GG	PM	8 days
253		3.5.2.1.3	Samgrid_util product cut with queue node clean-up, etc.	GG	PM	2 days
254	✓	3.5.2.1.4	Deploy/observe tools for auto-clean up of SamGrid job queue	GG	PM,SS	3 days
255	✓	3.5.2.1.8	Deploy/observe tools for auto-clean up of OSG job queue (Fwd Node 3 re-installed)	GG	SS	2 days
256		3.5.2.2	Automatic clean-up of disk areas	GG		67 days
257	✓	3.5.2.2.1	Resolve: Globus gatekeeper does not properly cleanup gass caches	GG	PM	1 day
258	✓	3.5.2.2.2	Periodically clean up gram log files at fwd nodes and exec sites	GG	PM	1 day
259	✓	3.5.2.2.3	Clean up sandboxes and jim_tmp areas at fwd node	GG	PM	1 day
260	✓	3.5.2.2.4	Clean up non-rotated log files (eg. Tomcat): CVS archive part	GG	PM	8 days
261	✓	3.5.2.2.5	Clean up non-rotated log files (eg. Tomcat): Logrotate part A	GG	PM	1 day
262		3.5.2.2.6	Clean up non-rotated log files (eg. Tomcat): Logrotate part B	GG	PM	7 days
263		3.5.2.3	Automation of all gridmap file management (including condor_schedd)	GG	PM	5 days
264	✓	3.5.2.4	Simplify maintenance of automatic clean-up scripts for durable locations	GG	AB2	5 days
265	✓	3.5.2.5	Add the deployment of scripts to installation instructions	GG	PM	1 day
266		3.5.2.7	MILE 23: Routine maintenance operations automated	GG		0 days
267	✓	3.5.4	Automatic handling of job log files	GG		94 days
268	✓	3.5.4.1	Reduce size of output sandbox	GG	AB2	1 day
269	✓	3.5.4.2	Make output sandbox space management more robust	GG	AB2	1 day
270	✓	3.5.4.3	Transfer output sandbox selection logic to Runjob: Initial Pass	GG	PL	20 days
271	✓	3.5.4.8	Transfer output sandbox selection logic to Runjob: Test, add old/new support	GG	AB2	8 days
272	✓	3.5.4.10	Transfer output sandbox selection logic to Runjob: Final testing	GG	AB2	10 days
273	✓	3.5.4.11	milestone: Automated handling of job log files	GG		0 days
274	✓	3.5.4.9	Logfile Access Tools			23 days
275	✓	3.5.4.9.1	Specify tools for accessing old logfiles	GG	MD	5 days
276	✓	3.5.4.9.2	Provide tools (to MD) for accessing old logfiles	GG	AB2	6 days
277	✓	3.5.4.9.3	Test logfile access tools	GG	MD	5 days
278	✓	3.5.4.9.4	Revise tools given customer feedback	GG	AB2	2 days
279		3.5.5	Automate system health alarms	GG		131 days
280	✓	3.5.5.1	NGOP central service	GG		66 days
281	✓	3.5.5.1.1	Define hardware	GG	AB2	1 day
282	✓	3.5.5.1.2	Install basic NGOP server	GG	AB2	1 day
283	✓	3.5.5.1.4	Deploy and test best schema as depicted	GG	AB2	1 day
284	✓	3.5.5.1.5	Understand SAM-Grid representation requirements: Dev part	AL	AB2	5 days
285	✓	3.5.5.1.6	Understand SAM-Grid representation requirements: Ops part	AL	RH	5 days
286	✓	3.5.5.1.9	Static NGOP configuration approach (instead of automated)	AL	AB2,REX	8 days
287	✓	3.5.5.1.8	milestone: NGOP central service prepared	GG		0 days
288	✓	3.5.5.2	Samgrid_mon	GG		19 days
289	✓	3.5.5.2.1	Develop persistent environment for repetitive task execution	GG	AB2	10 days
290	✓	3.5.5.2.2	Develop converter between SamGrid config and next-gen cron	GG	AB2	5 days
291	✓	3.5.5.2.4	Store duplicate configuration of fwd node	GG	AB2	1 day
292	✓	3.5.5.2.5	Accept existing configuration of fwd node	GG	AB2	1 day
293	✓	3.5.5.2.6	Dispatch list of monitoring agents periodically, collect statuses	GG	AB2	1 day

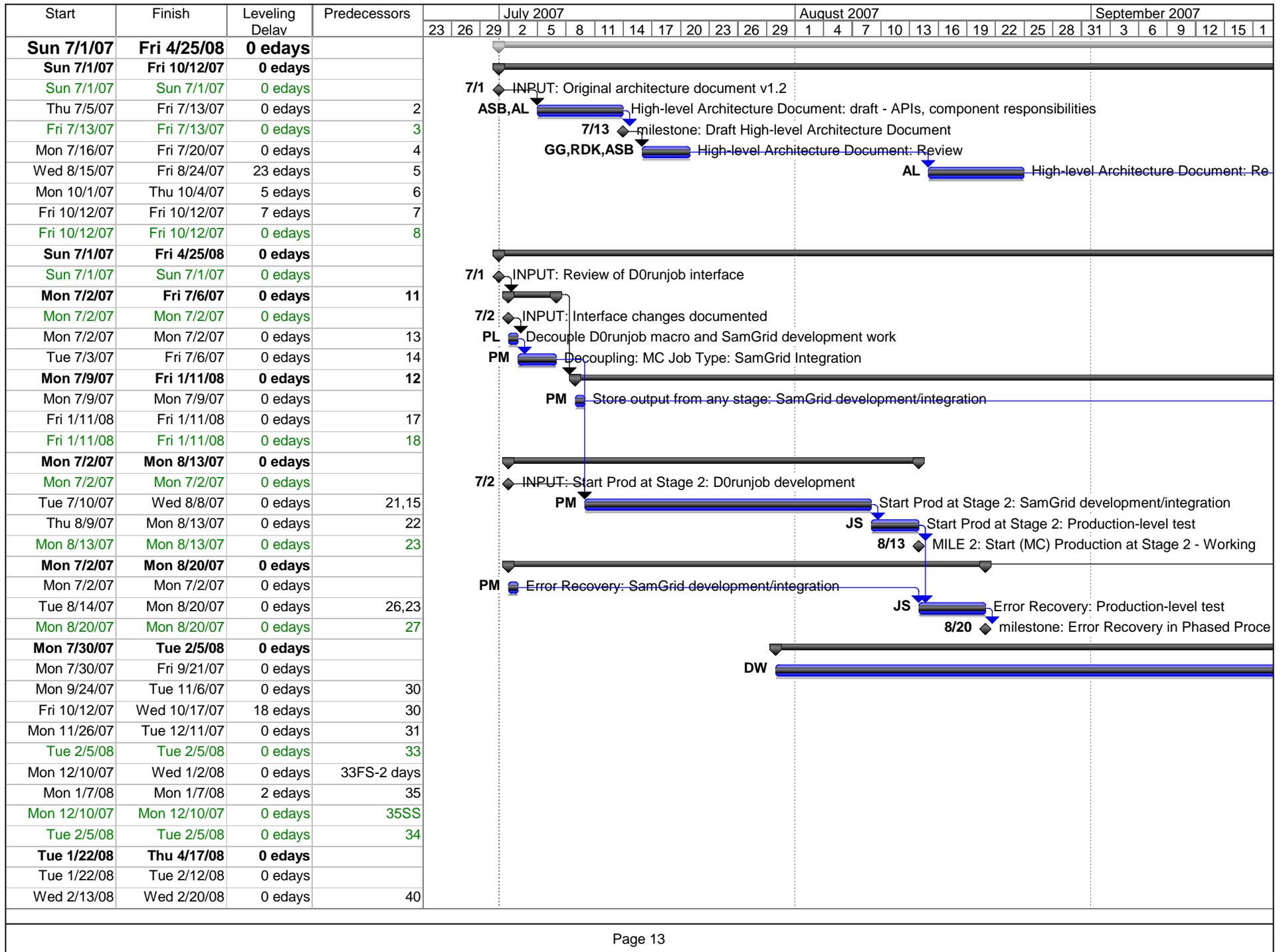
ID		WBS	Task Name	Contact	Resource Initials	Duration
294	✓	3.5.5.2.7	Create distributable UPD package	GG	AB2	1 day
295	✓	3.5.5.2.8	milestone: Samgrid_mon developed	GG		0 days
296	✓	3.5.5.3	Develop monitoring scripts	GG		13 days
297	✓	3.5.5.3.1	Develop generic scripts for Gridftp and Fcp monitoring	GG	AB2	1 day
298	✓	3.5.5.3.3	Data Nodes: Stager, Durable location, caches, Gridftp, Fcp	GG	AB2	6 days
299	✓	3.5.5.3.2	Forwarding Node: Gridftp, Fcp, Jim_advertise, XML db, Sandbox, opt. sched. component	GG	AB2	6 days
300	✓	3.5.5.3.4	milestone: Monitoring scripts developed	GG		0 days
301	✓	3.5.5.5	Assess automation of alarming systems	GG	AB2	2 days
302	✓	3.5.5.6	Integration deployment and testing	GG	AB2	4 days
303	✓	3.5.5.7	Documentation Initiation	GG	AB2	5 days
304	✓	3.5.5.4	MILE 19: System health alarms deployed via NGOP with static config	GG		0 days
305	✓	3.5.5.12	Generate NGOP agents from set of monitoring scripts and config	GG	AB2	2 days
306	✓	3.5.5.14	Documentation Completion	GG	AB2	18 days
307	✓	3.5.5.15	Create NGOP config baseline, support process, training	AL	AL,AB2	10 days
308	✓	3.5.5.16	Migrate service from d0srv15 to samgfw01	AL	AB2	2 days
309		3.5.5.17	Configure a back-up health alarm server on distinct forwarding node	AL	SS	2 days
310		3.5.5.18	Add health alarm service install instructions or link to Fwd Node Install instructions	AL	DEV	2 days
311		3.5.5.8	milestone: System health alarms via NGOP with sustainable process	GG		0 days
312	✓	3.5.6	Improve system testing infrastructure	GG		3 days
313	✓	3.5.6.1	Simplify running test jobs	GG		3 days
314	✓	3.5.6.1.1	Create test parameters for all job types	GG	AB2	1 day
315	✓	3.5.6.1.2	Create and distribute JDL templates with test parameters	GG	AB2	1 day
316	✓	3.5.6.1.3	Write testing instructions	GG	AB2	1 day
317	✓	3.5.6.1.4	milestone: Running test jobs simplified per request	GG		0 days
318		3.5.7	milestone: End of the Road to Operations	GG		0 days
319	✓	3.7	Other Operations-related Fixes and Upgrades	GG		108 days
320	✓	3.7.1	Clarify D0 certificate approval process, personnel	GG	GG	5 days
321	✓	3.7.5	Investigate "Immortal Jobs" Operations Issue	GG		0 days
322		3.8	MILE 27: Close-out of Ops Reduction/Transfer completed	GG		0 days
323		4	D0 Primary Production on Fermigrid	MD		193 days
324	✓	4.1	Initial Commissioning	MD		9 days
325	✓	4.1.1	INPUT: Attempt to run D0 Primary Production on FermiGrid	MD	MD	0 days
326	✓	4.1.2	OSG/Fermigrid Resource Selection Meeting	MD	MD	0.5 days
327	✓	4.1.3	Config D0Production role: Fermigrid, GUMS, CAB, PBS, etc.	ST,FEF	MD	6 days
328	✓	4.1.4	Run D0 Primary Prod via D0Production role	MD	MD	1 day
329	✓	4.1.5	MILE 1: D0 Primary Production Runnable on Fermigrid	MD		0 days
330	✓	4.2	D0PPF Commissioning Evaluation Meeting	RDK		1 day
331		4.3	Stable Operations	MD		154 days
332	✓	4.3.1	Commissioning Follow-up	MD		9 days
333	✓	4.3.1.1	Fix d0srv065 storage issues	MD	MD	3 days
334	✓	4.3.1.2	Run D0 Primary Prod to verify storage fix	MD	MD	3 days
335	✓	4.3.1.3	Scale-up D0 Primary Prod to 200 nodes	MD	MD	3 days

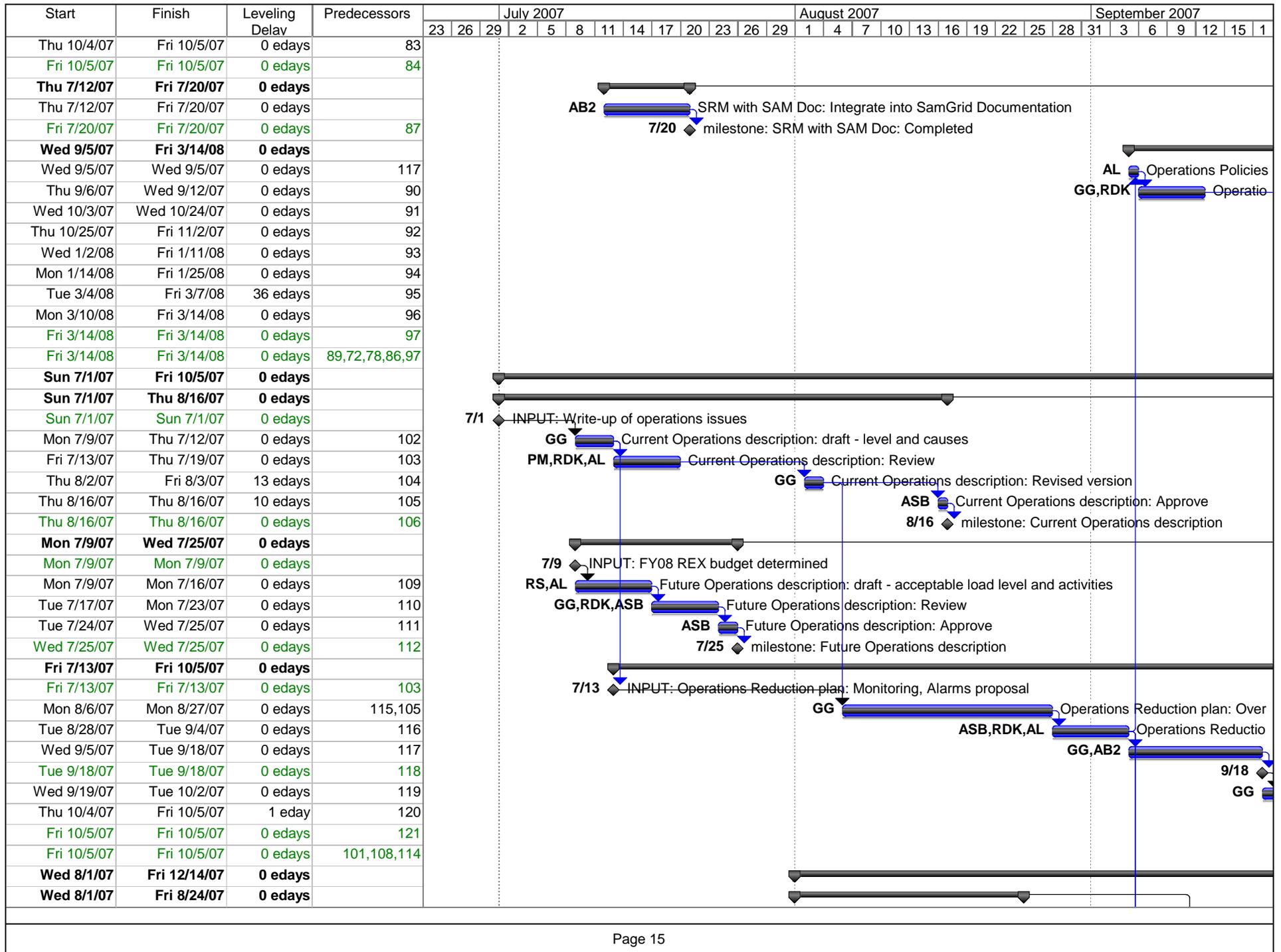
ID		WBS	Task Name	Contact	Resource Initials	Duration
336	✓	4.3.1.4	milestone: D0PPF Stable Ops: Commissioning follow-up completed	MD	MD	0 days
337		4.3.2	Management Processes and Documentation	MD		132 days
338	✓	4.3.2.1	Implement Change Management for feature requests using SAM IssueTracker	MD		1 day
339	✓	4.3.2.2	Establish service level for stable operations and implications on system config	MD,GG,PM,JS		5 days
340	✓	4.3.2.3	Grid Production System workflow/dataflow diagram - draft	RDK	RDK	3 days
341	✓	4.3.2.4	Grid Production System info on diagram: node roles, software, maintainers	RDK	RDK,AB2	2.5 days
342	✓	4.3.2.8	Grid Production System workflow/dataflow diagram - final	RDK	RDK	5 days
343	📄	4.3.2.9	Post Grid Production System hardware map v3 to Wiki	RDK	AL	1 day
344	✓📄	4.3.2.5	Open Science Enclave baseline security plan - implications on SamGrid, CAB	MD	MD,GG,FEF	20 days
345	✓	4.3.2.7	milestone: D0PPF Stable Ops: Management Processes and Documentation done	MD		0 days
346		4.3.3	System Monitoring	MD		49 days
347	✓📄	4.3.3.1	CAB web monitoring infrastructure upgrade	RDK	FEF	18 days
348	✓📄	4.3.3.6	CAB web monitoring changes requested by MD,JS - data collection	RDK	FEF	16 days
349	✓📄	4.3.3.7	CAB web monitoring: Evaluate 3rd party PBS monitoring package	RDK	FEF	4 days
350	📄	4.3.3.5	CAB web monitoring changes requested by MD,JS - data presentation	RDK	FEF	10 days
351		4.3.3.4	milestone: D0PPF Stable Ops: System Monitoring done	MD		0 days
352		4.3.4	Specific System Services Issues	MD		107 days
353	📄📄	4.3.4.1	Allow access by MD to dir/files on CAB owned by dzeropro (suggested: get root access)	MD	MD	34 days
354		4.3.4.2	JIM production release consistent with d0runjob v7-7-3 and higher	MD	MD	34 days
355	✓📄	4.3.4.3	Evaluate use of ReSS (more flexible than use of roles)	GG	GG	28 days
356	✓📄	4.3.4.5	Determine in detail how to adapt to use ReSS in D0GPCI	GG	GG	13 days
357	✓📄	4.3.4.6	Forward user's job scheduler requirements to sites: client side	GG	PM	4 days
358	✓📄	4.3.4.7	Forward user's job scheduler requirements to sites: execution side	GG	PM	3 days
359		4.3.4.8	Forward user's job scheduler requirements to sites: D0Runjob changes	GG	PL,PM	5 days
360		4.3.4.9	Forward user's job scheduler requirements to sites: pre-production testing	GG	MD	4 days
361		4.3.4.4	milestone: D0PPF Stable Ops: Specific System Services done	MD		0 days
362		4.3.5	General System Services Issues (Road to Operations)	GG		136 days
363		4.3.5.1	INPUT: (3.5.1) Standardize file system layout on SamGrid nodes	GG		0 days
364		4.3.5.2	INPUT: (3.5.1) Get all nodes governing operation in a consistent, known state	GG		0 days
365	✓	4.3.5.3	INPUT: (3.5.4) Evaluate how to reduce bandwidth consumed by moving logs	GG		0 days
366	✓	4.3.5.4	INPUT: (3.5.4) Make Custom output support smarter, use compression	GG		0 days
367	✓	4.3.5.5	INPUT: (3.5.4) Migrate Custom output support from SAM wrapper to D0runjob	GG		0 days
368	✓📄	4.3.5.6	INPUT: (3.5.4) Implement a logfile archive node	GG		0 days
369		4.3.5.7	milestone: D0PPF Stable Ops: General System Services done	GG		0 days
370	✓	4.4	D0PPF Operations Evaluation Meeting	RDK		1 day
371		4.7	MILE 28: D0 Primary Production Stable on Fermigrid	MD		0 days
372	✓📄	5	Extend Grid Production System Functionality	GG		83 days
373	✓📄	5.1	Forwarding Node Behind Firewall	GG		5 days
374	✓	5.1.1	Forwarding Node Behind Firewall: Evaluate, determine best course of action	GG	AB2	5 days
375	✓	5.2	Minimal Resource Brokering	GG		20 days
376	✓	5.2.1	Minimal Resource Brokering: Evaluate, determine best course of action	GG	GG	20 days
377	✓	5.3	MILE 16: Grid Production System functionality completed	GG		0 days

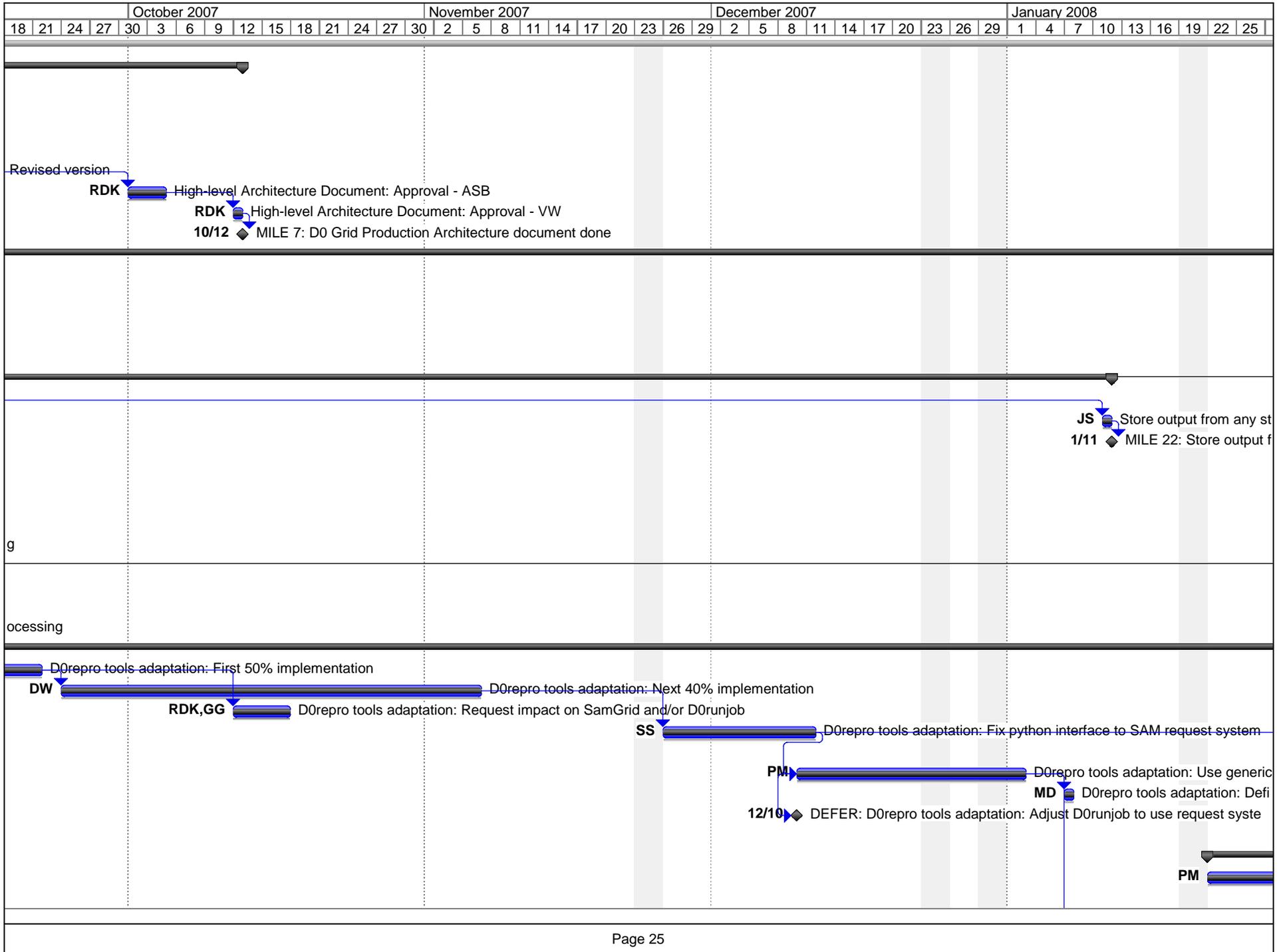
ID		WBS	Task Name	Contact	Resource Initials	Duration
378		6	Preparation of D0 Apps for Long-term	ASB		92 days
379		6.1	Skimming	HG		0 days
380		6.1.1	Productize Skimming	RDK		0 days
381		6.2	CAF Trees			0 days
382		6.2.1	Productize CAF Tree generation	RDK		0 days
383		6.3	Raw2Sim			0 days
384		6.3.1	Productize Raw2Sim	RDK		0 days
385		6.4	AADST			92 days
386		6.4.1	Productize AADST	RDK		0 days
387		6.4.3	Enable data migration to SAM storage	AL	AL	2 days
388		6.4.4	Track data migration to SAM storage	AL	AL	80 days
389		6.4.5	Perform data migration to SAM storage	AL	D0	90 days
390		6.6	Write recommendations for productization of D0 Apps	RDK	RDK	11 days
391		6.5	MILE 24: Preparation of D0 Apps for long-term	ASB		0 days
392		7	Evaluation of D0 SamGrid Requests	RDK		85 days
393		7.1	Reco			0 days
394		7.1.1	EVAL: Ability to merge more than 1 stream from Reco	RDK		0 days
395		7.2	MC Production			0 days
396		7.2.1	EVAL: Ability to run TrigSim in MC Production	RDK		0 days
397		7.3	Skimming			0 days
398		7.3.1	EVAL: Skimming in Production	RDK		0 days
399		7.4	EVAL: Fixing			0 days
400		7.5	Raw2Sim			0 days
401		7.5.1	EVAL: Run raw2sim on minbias files	RDK		0 days
402		7.6	Reco-cert			85 days
403		7.6.1	EVAL: Merging of reco-cert files	RDK		0 days
404		7.6.2	Stand-alone production of reco-cert output on SamGrid			9 days
405		7.6.2.1	Develop WBS for implementing S/A Recocert on SamGrid	RDK	RDK	9 days
406		7.7	CAF Trees			0 days
407		7.7.1	EVAL: CAF Trees from Production	RDK		0 days
408		7.8	EVAL: MC CAF Trees	RDK		0 days
409		7.9	EVAL: AADST	RDK		0 days
410		7.10	EVAL: Grid Analysis	RDK		0 days
411		7.12	Evaluate remaining D0 SamGrid Requests	RDK		85 days
412		7.12.2	Develop generic WBS for adapting D0 Apps to Grid Production	RDK	RDK	9 days
413		7.12.3	Create form to capture D0 App requirements, workflow, use patterns - draft	RDK	RDK	2 days
414		7.12.4	Create maintainable list of known portability issues for D0 Apps on Grid - draft	RDK	RDK	2 days
415		7.12.10	Mini-docs on D0 App requirements, known portability issues - final	RDK	RDK	2 days
416		7.12.1	D0 SamGrid Requests Evaluation: Draft version (v0.8)	RDK	RDK	5 days
417		7.12.8	D0 SamGrid Requests Evaluation: Meet w/D0 Spokes and Vicky White	RDK		0 days
418		7.12.9	D0 SamGrid Requests Evaluation: Review version (v0.9)	RDK	RDK	2 days
419		7.12.5	D0 SamGrid Requests Evaluation: Internal Review	RDK		6 days

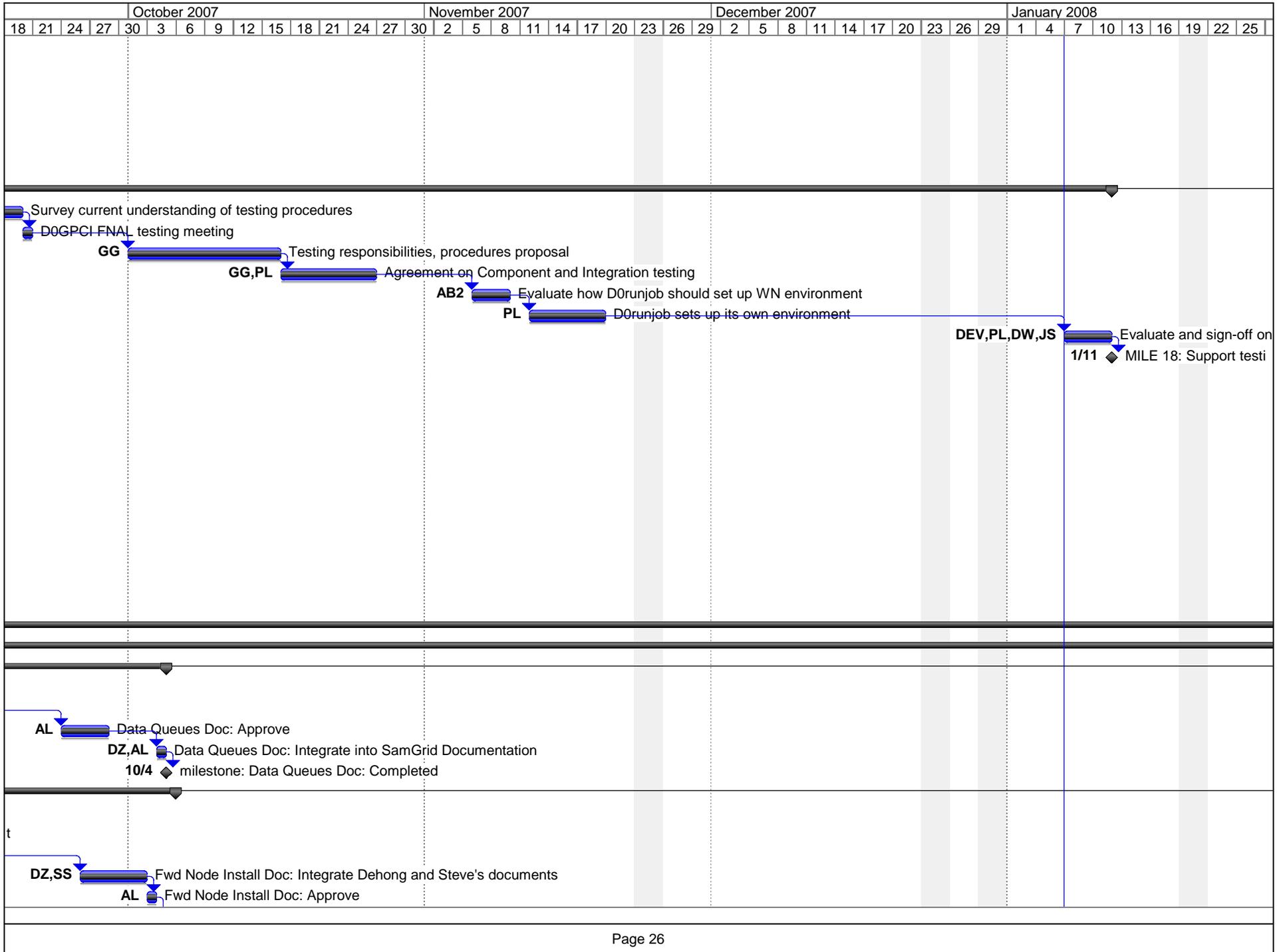
ID		WBS	Task Name	Contact	Resource Initials	Duration
420	✓	7.12.6	D0 SamGrid Requests Evaluation: Revision (v1.0)	RDK	RDK	2 days
421	✓	7.11	MILE 25: Evaluation of D0 SamGrid Requests done	RDK		0 days
422	✓	8	Project Management	RDK		198 days
423	✓	8.1	INPUT: Draft Preliminary High-level WBS	RDK	RDK	0 days
424		8.2	Initiative Coordination Meeting	RDK		176.13 days
425	✓	8.2.1	Initiative Coordination Meeting 1	RDK		1 hr
426	✓	8.2.2	Initiative Coordination Meeting 2	RDK		1 hr
427	✓	8.2.3	Initiative Coordination Meeting 3	RDK		1 hr
428	✓	8.2.4	Initiative Coordination Meeting 4	RDK		1 hr
429	✓	8.2.5	Initiative Coordination Meeting 5	RDK		1 hr
430	✓	8.2.6	Initiative Coordination Meeting 6	RDK		1 hr
431	✓	8.2.7	Initiative Coordination Meeting 7	RDK		1 hr
432	✓	8.2.8	Initiative Coordination Meeting 8	RDK		1 hr
433	✓	8.2.9	Initiative Coordination Meeting 9	RDK		1 hr
434	✓	8.2.10	Initiative Coordination Meeting 10	RDK		1 hr
435	✓	8.2.11	Initiative Coordination Meeting 11	RDK		1 hr
436	✓	8.2.12	Initiative Coordination Meeting 12	RDK		1 hr
437	✓	8.2.13	Initiative Coordination Meeting 13	RDK		1 hr
438	✓	8.2.16	Initiative Coordination Meeting 14	RDK		1 hr
439	✓	8.2.14	Initiative Coordination Meeting 15	RDK		1 hr
440	✓	8.2.17	Initiative Coordination Meeting 16	RDK		1 hr
441	✓	8.2.15	Initiative Coordination Meeting 17	RDK		1 hr
442	✓	8.2.19	Initiative Coordination Meeting 18	RDK		1 hr
443	✓	8.2.20	Initiative Coordination Meeting 19	RDK		1 hr
444	✓	8.2.21	Initiative Coordination Meeting 20	RDK		1 hr
445	✓	8.2.22	Initiative Coordination Meeting 21	RDK		1 hr
446	✓	8.2.23	Initiative Coordination Meeting 22	RDK		1 hr
447	✓	8.2.24	Initiative Coordination Meeting 23	RDK		1 hr
448	✓	8.3	Project Planning	RDK		78.9 days
449	✓	8.3.1	WBS/Schedule v0.8 for 3/7 objectives	RDK	RDK	10 days
450	✓	8.3.2	milestone: WBS/Schedule v0.8, begin weekly status'ing	RDK		0 days
451	✓	8.3.3	WBS/Schedule v0.9 for 5/7 objectives	RDK	RDK	13 days
452	✓	8.3.4	milestone: Plan v0.9 sufficient to drive near-term work	RDK		0 days
453	✓	8.3.5	Draft WBS/Schedule v1.0 for 7/7 objectives	RDK	RDK,GG	32 days
454	✓	8.3.6	Big Baseline Planning Meeting	RDK		1 day
455	✓	8.3.7	Create Baseline Project Plan v1.0	RDK	RDK	2 days
456	✓	8.3.8	MILE 6: Baseline Project Plan v1.0 released	RDK		0 days
457	✓	8.3.9	Baseline Project Plan: Executive Presentations	RDK	RDK	4 days
458	✓	8.3.12	Baseline Project Plan v1.0: Integrate feed-back	RDK	RDK	2 days
459	✓	8.3.13	Baseline Plan Project v1.1: Drop tasks pushed out past end of Initiative	RDK	RDK	2 days
460	✓	8.3.14	MILE 8: Project Plan v1.1	RDK		0 days
461	✓	8.4	Project Administration	RDK		156.9 days

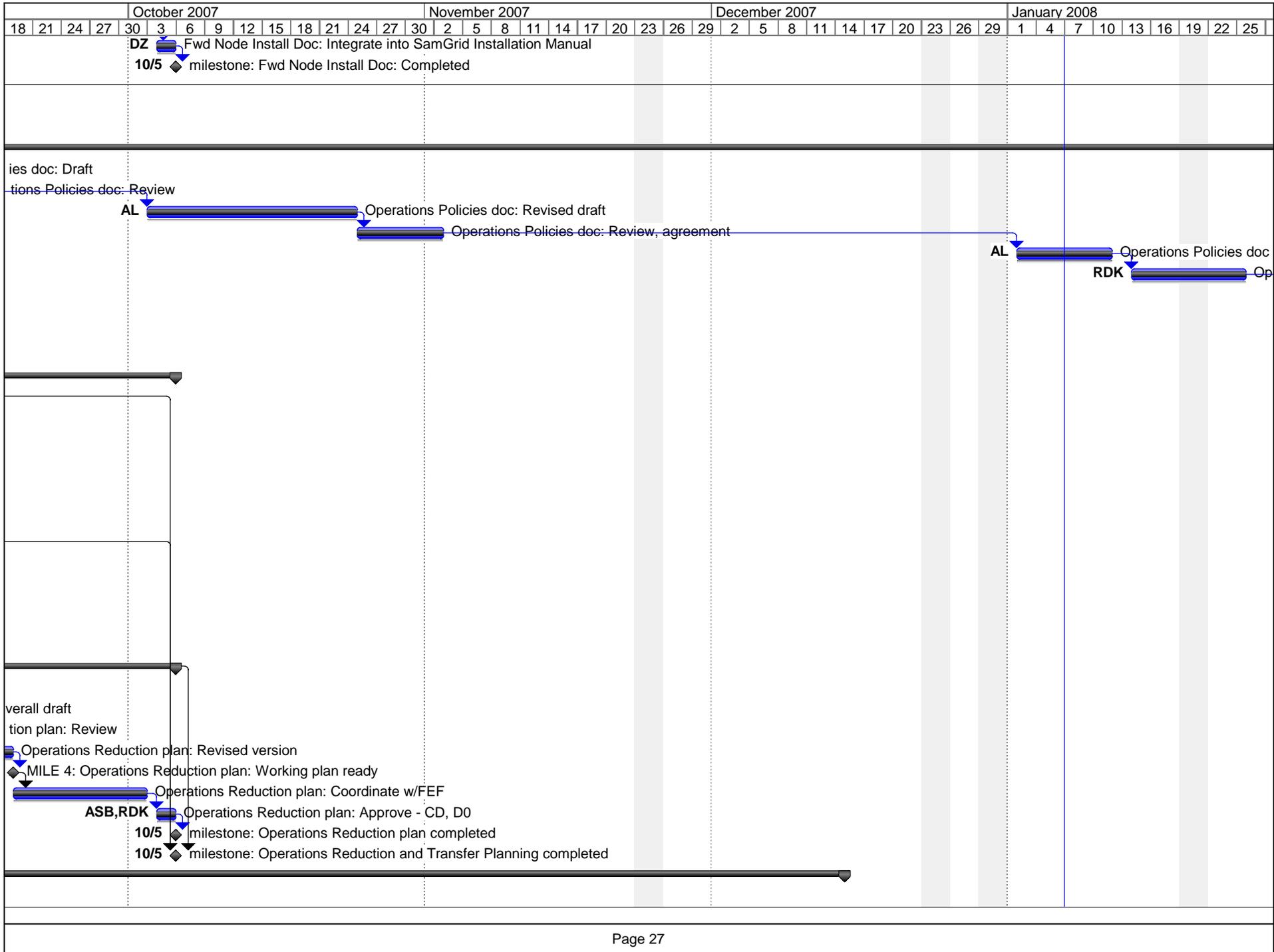
ID		WBS	Task Name	Contact	Resource Initials	Duration
462		8.4.1	Planning Phase (Level of Effort = 5%)	RDK	RDK	48 days
463		8.4.2	Execution Phase (Level of Effort >= 15%)	RDK	RDK	89 days
464		8.5	Project Close-out	RDK		30 days
465		8.5.6	Project Objectives Close-out Document	RDK	RDK	7 days
466		8.5.7	Prepare Rough Draft D0 Technical Note with Project Documents	RDK	RDK	3 days
467		8.5.1	Project Close-out Meeting	RDK	RDK	1 day
468		8.5.2	Project Close-out Report	RDK	RDK	5 days
469		8.5.3	Project Close-out Report Approval: ABS, CD	RDK	ASB,RDK	3 days
470		8.5.4	Archive project artifacts	RDK	RDK	2 days
471		8.5.5	milestone: Initiative Closed-out	RDK		0 days
472		9	MILE 29: D0 GPC Initiative completed	ASB		0 days

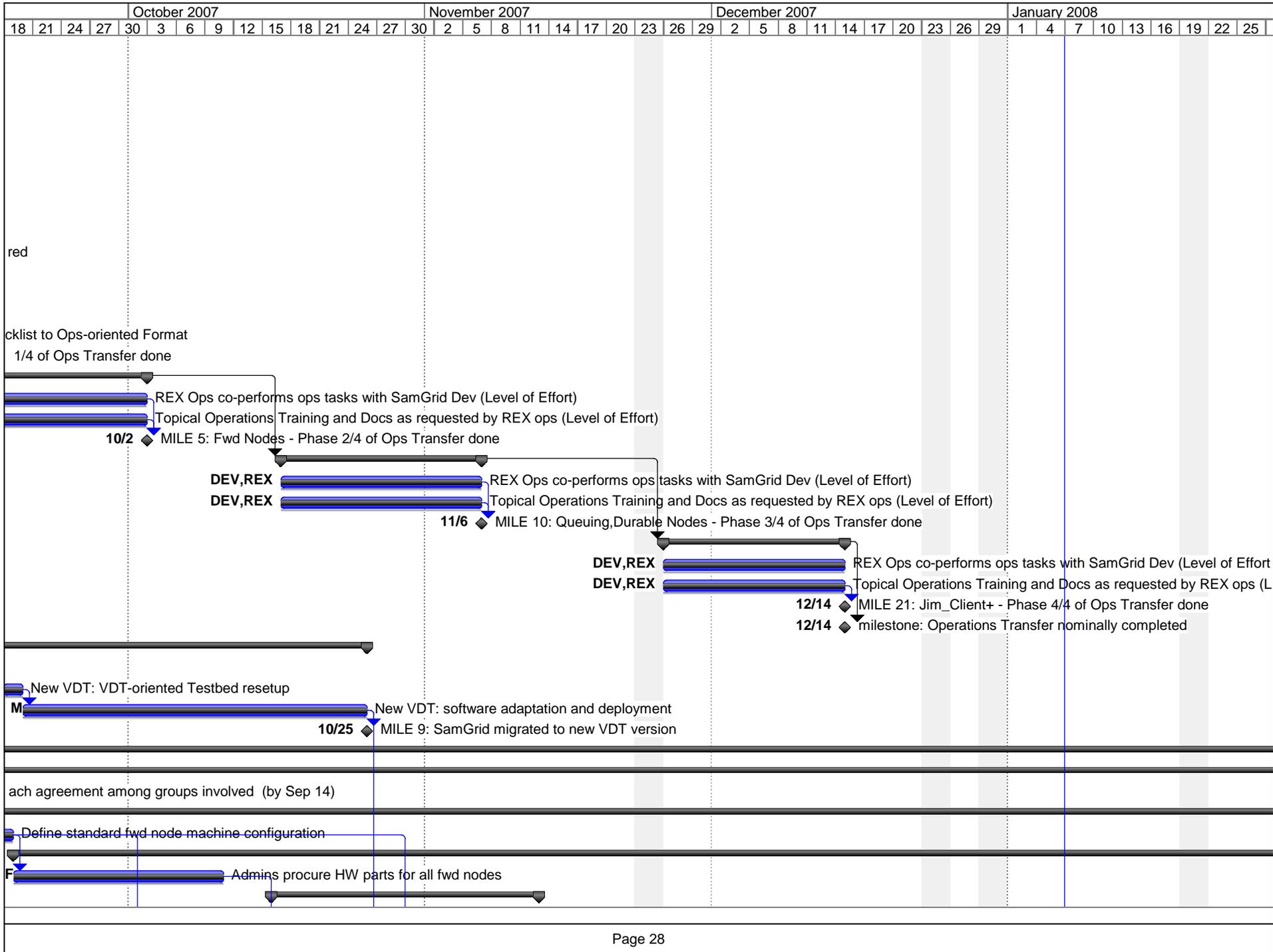




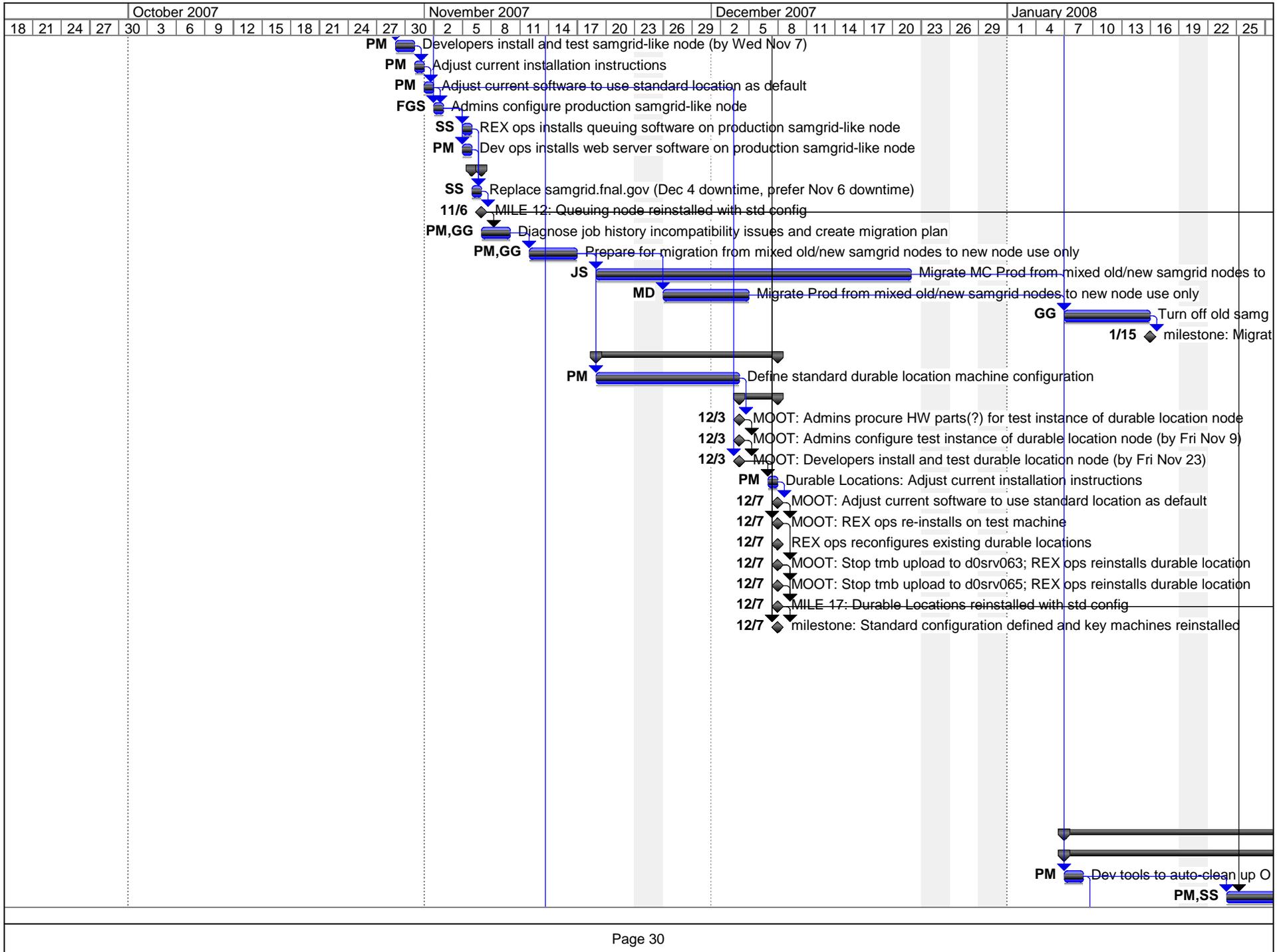


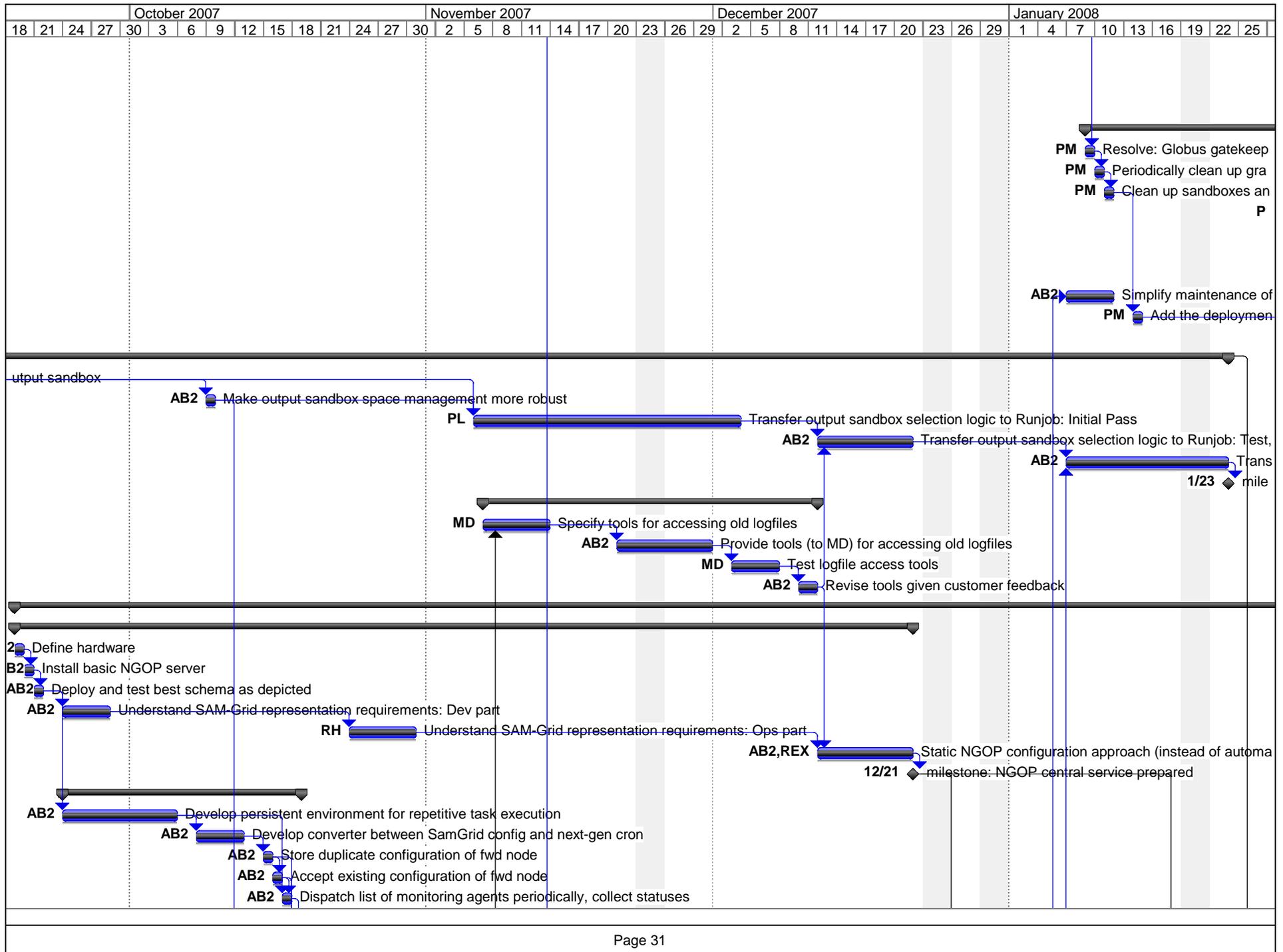


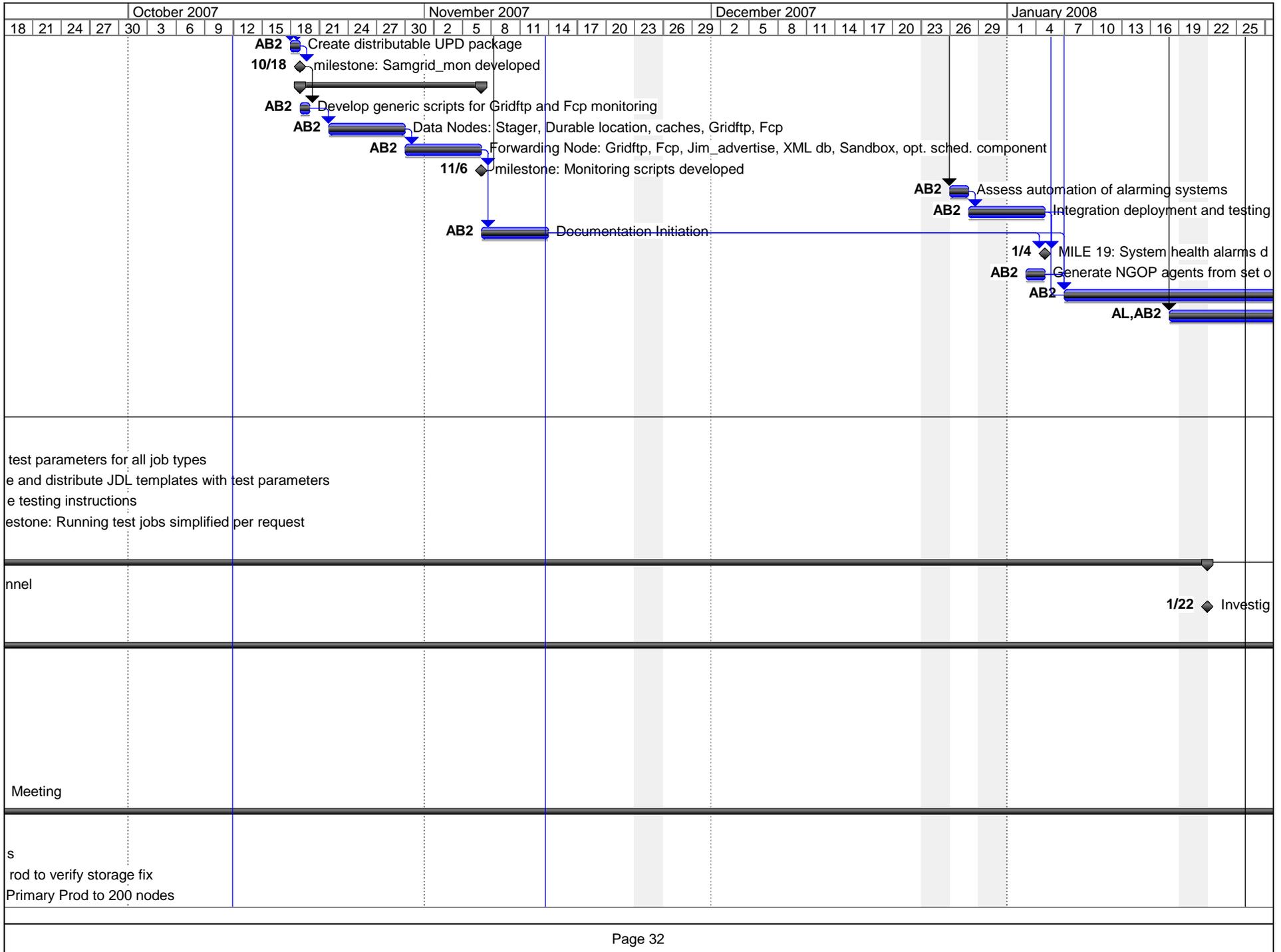


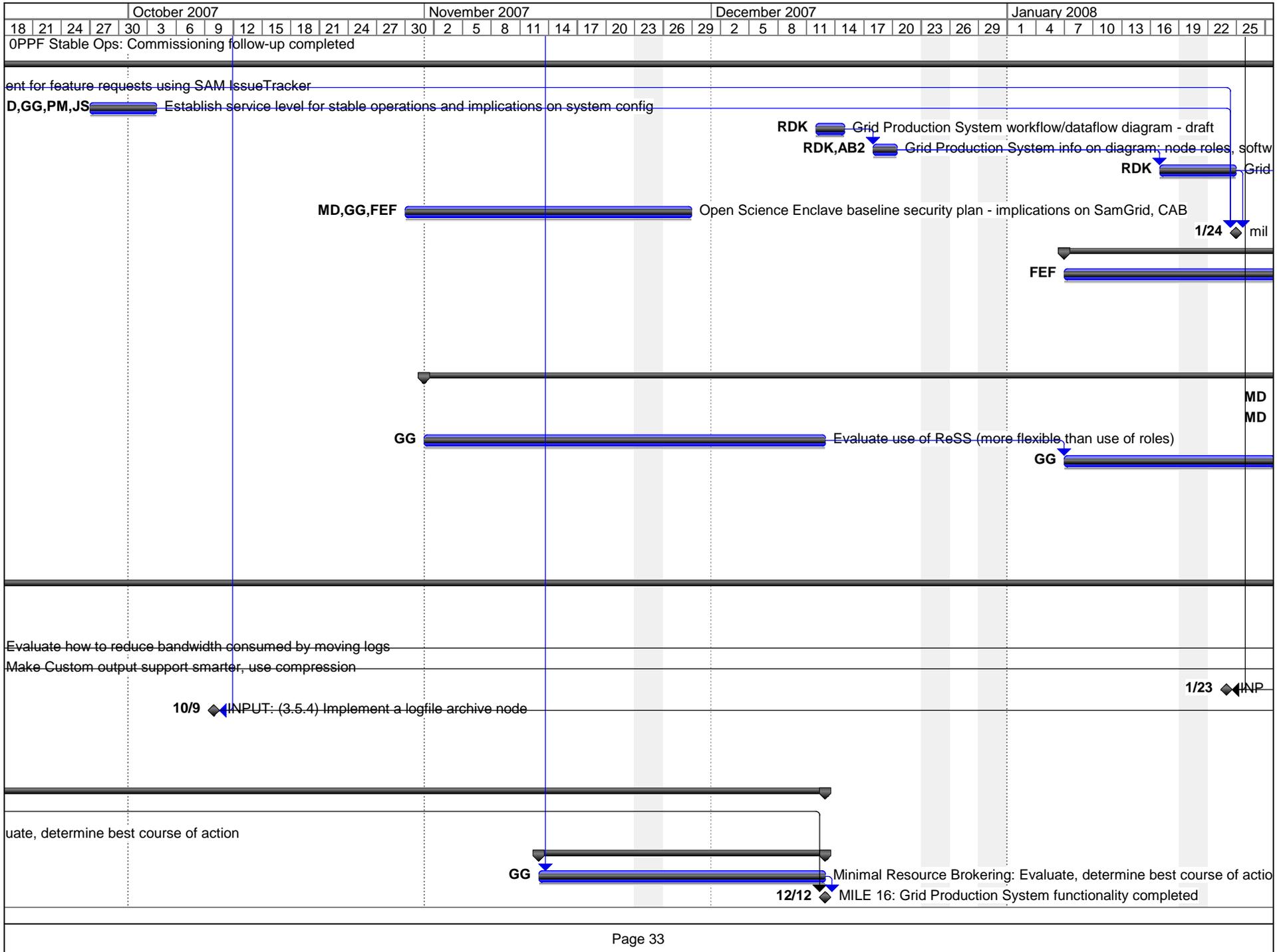


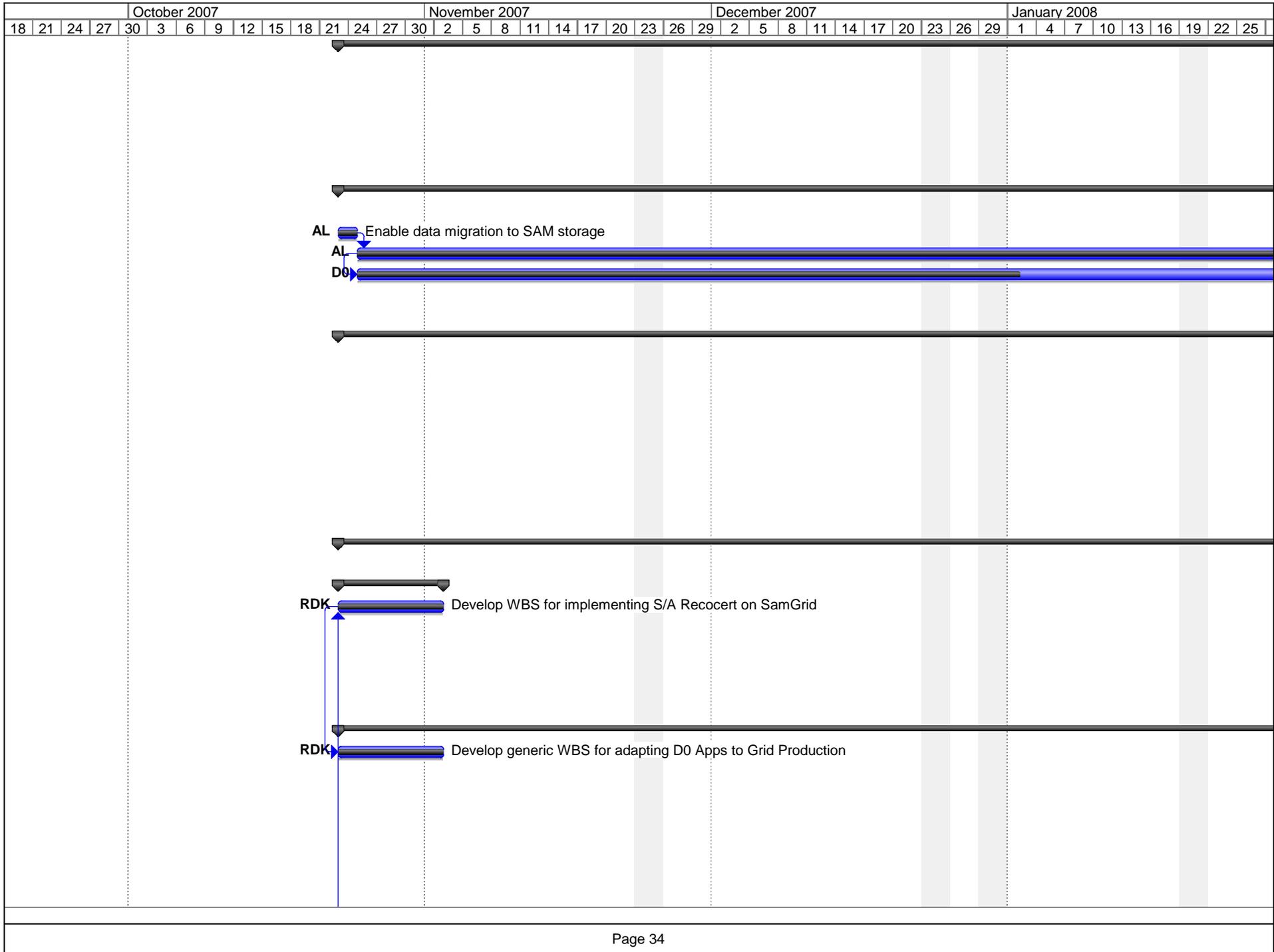


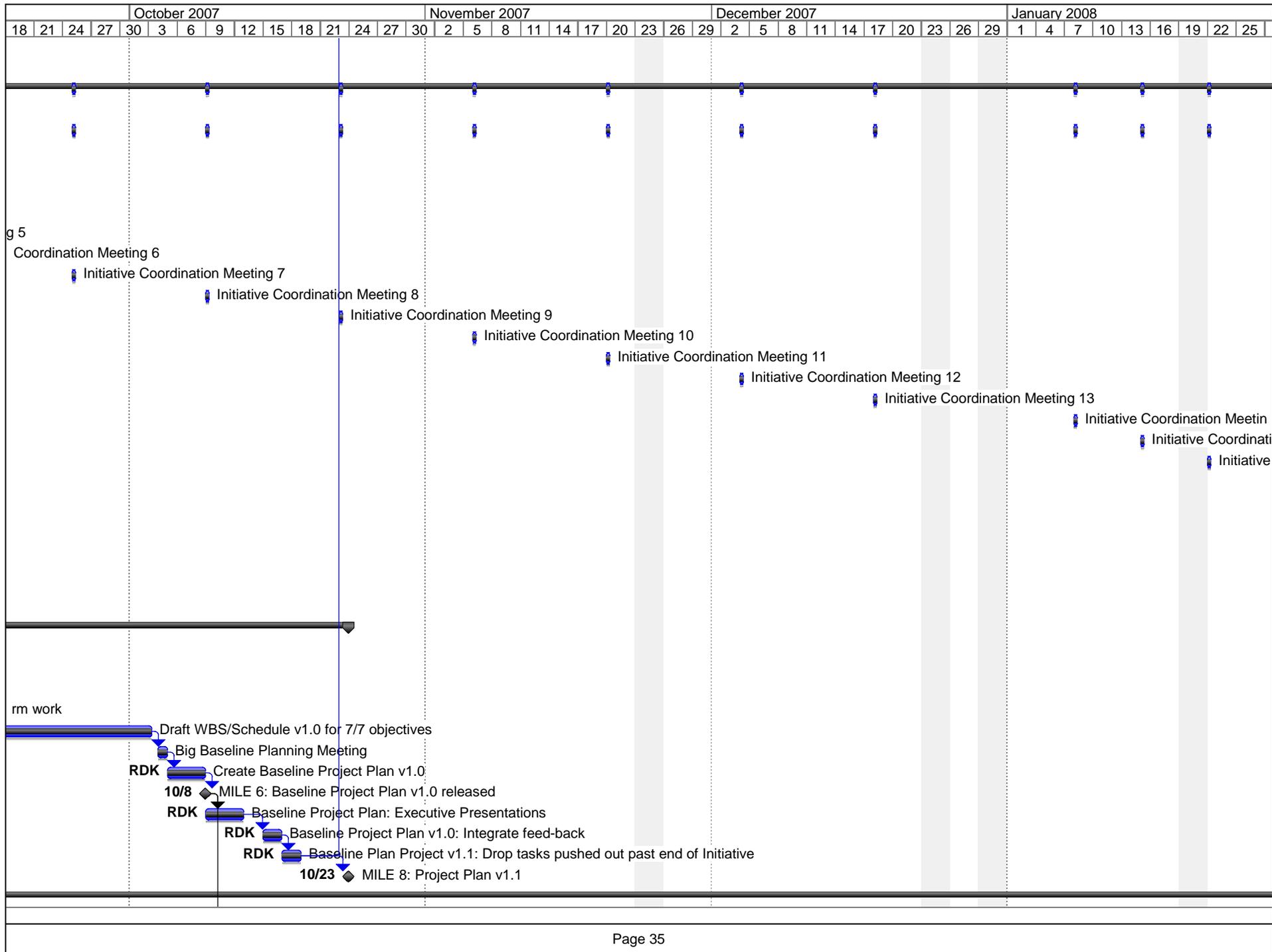








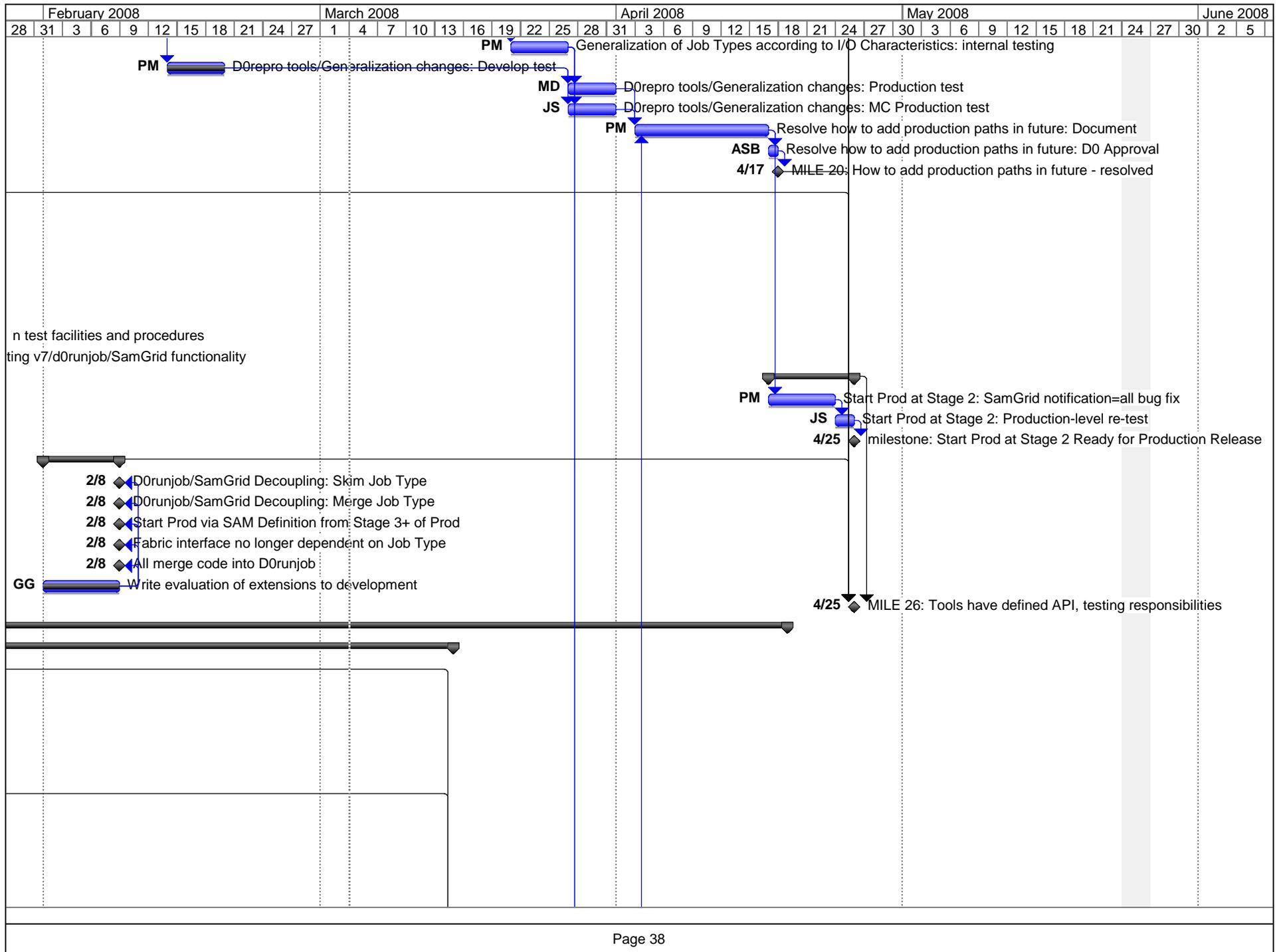


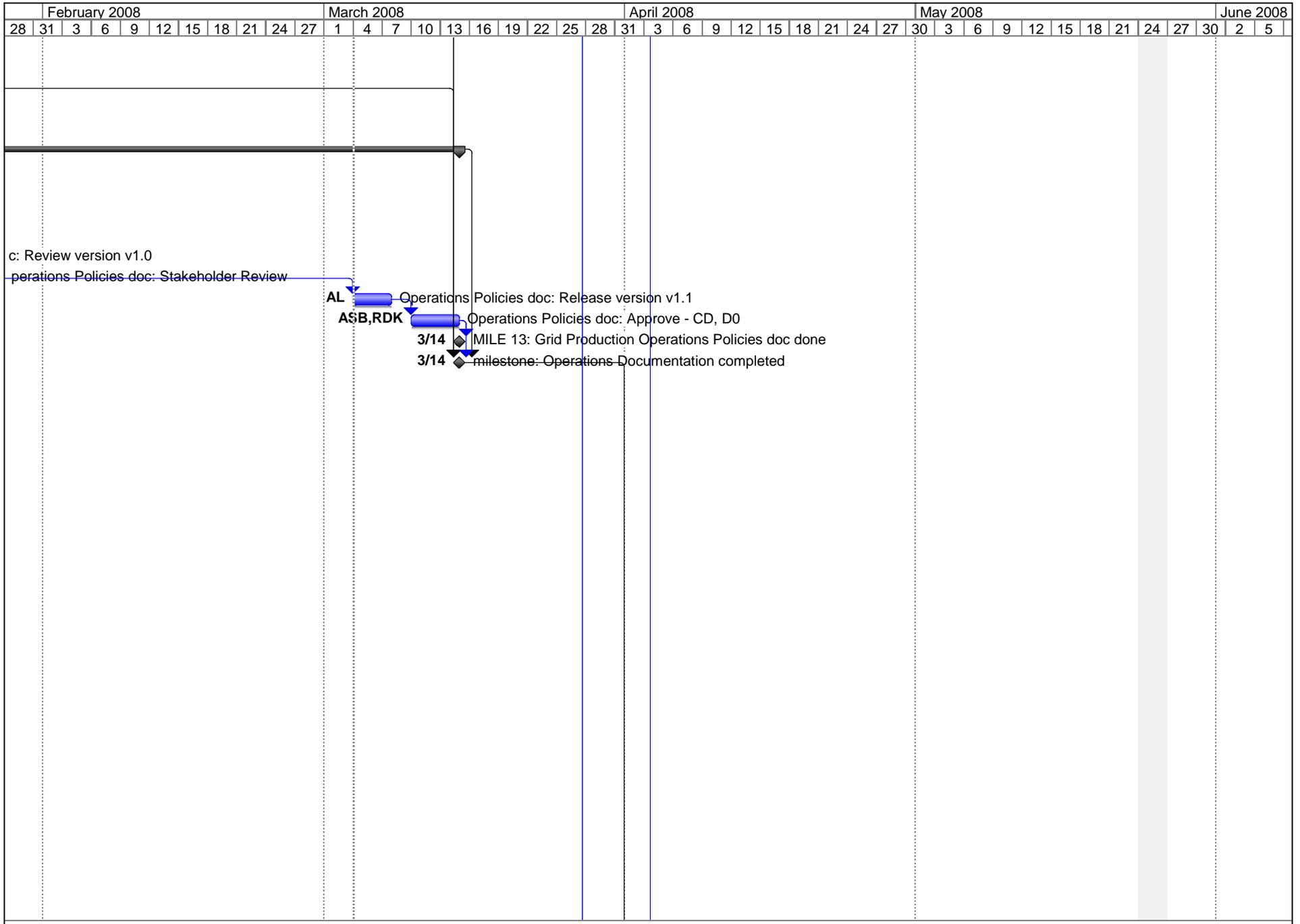


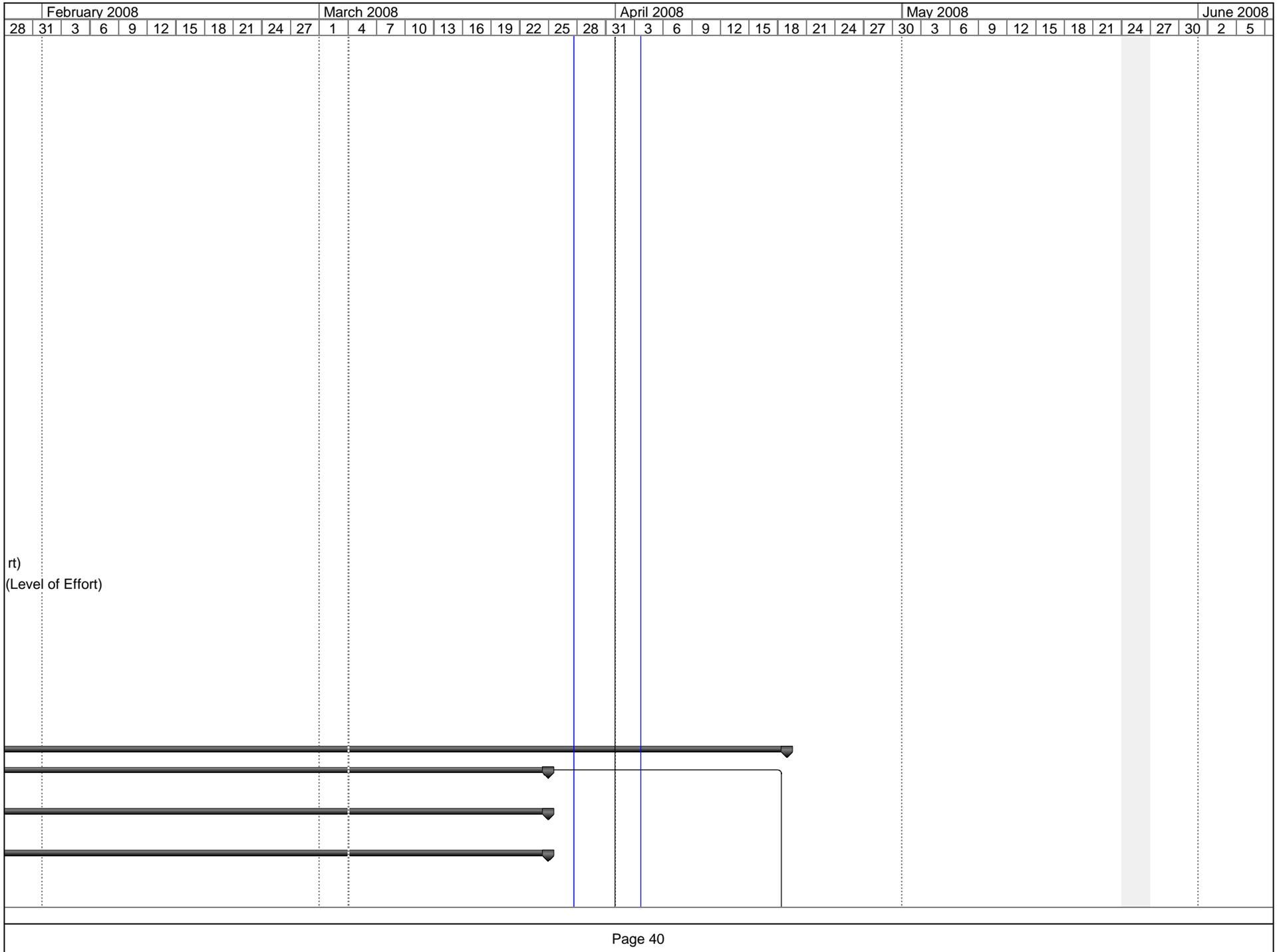
October 2007									November 2007									December 2007									January 2008																
18	21	24	27	30	3	6	9	12	15	18	21	24	27	30	2	5	8	11	14	17	20	23	26	29	2	5	8	11	14	17	20	23	26	29	1	4	7	10	13	16	19	22	25

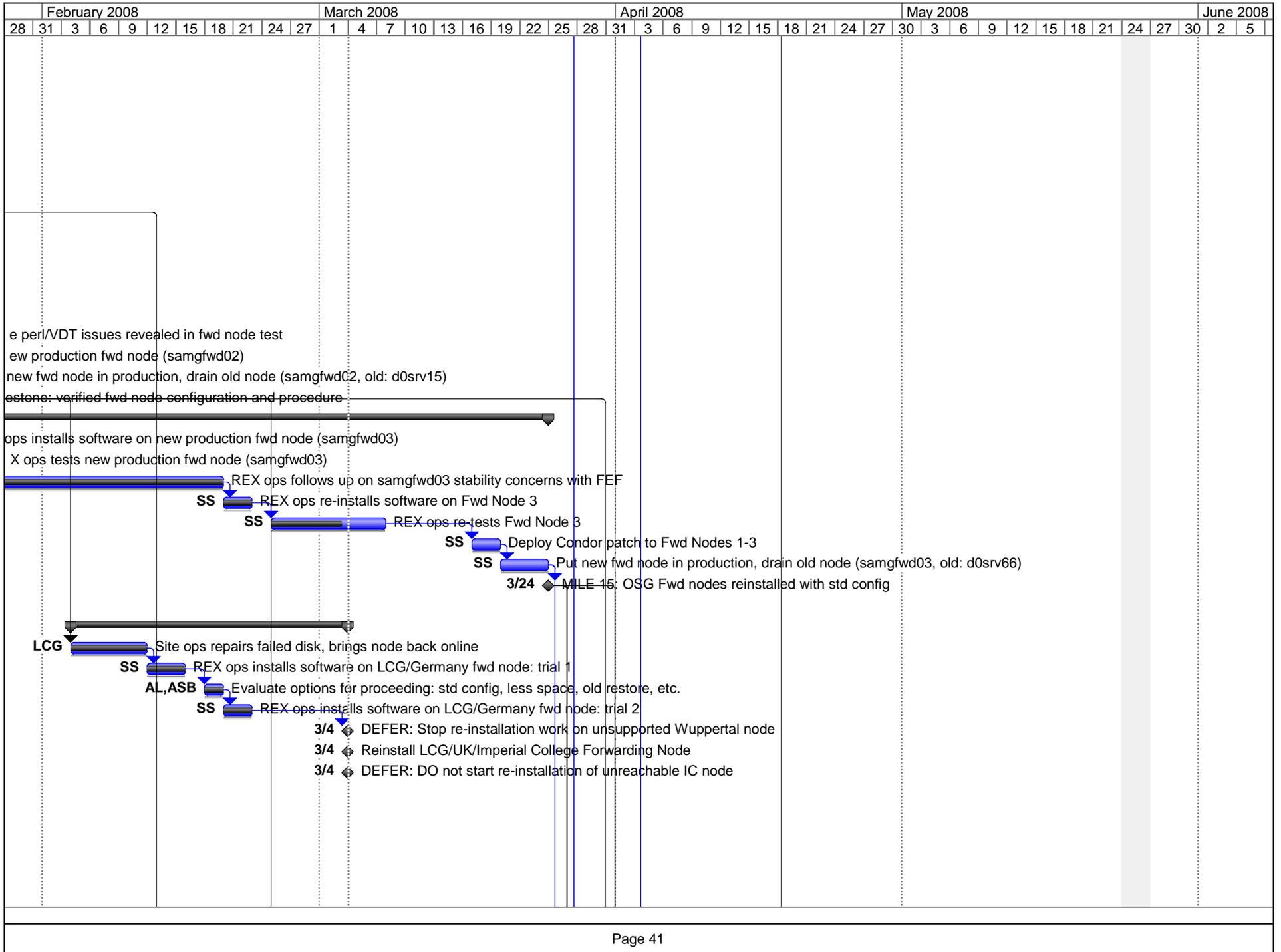
Planning Phase (Level of Effort = 5%)

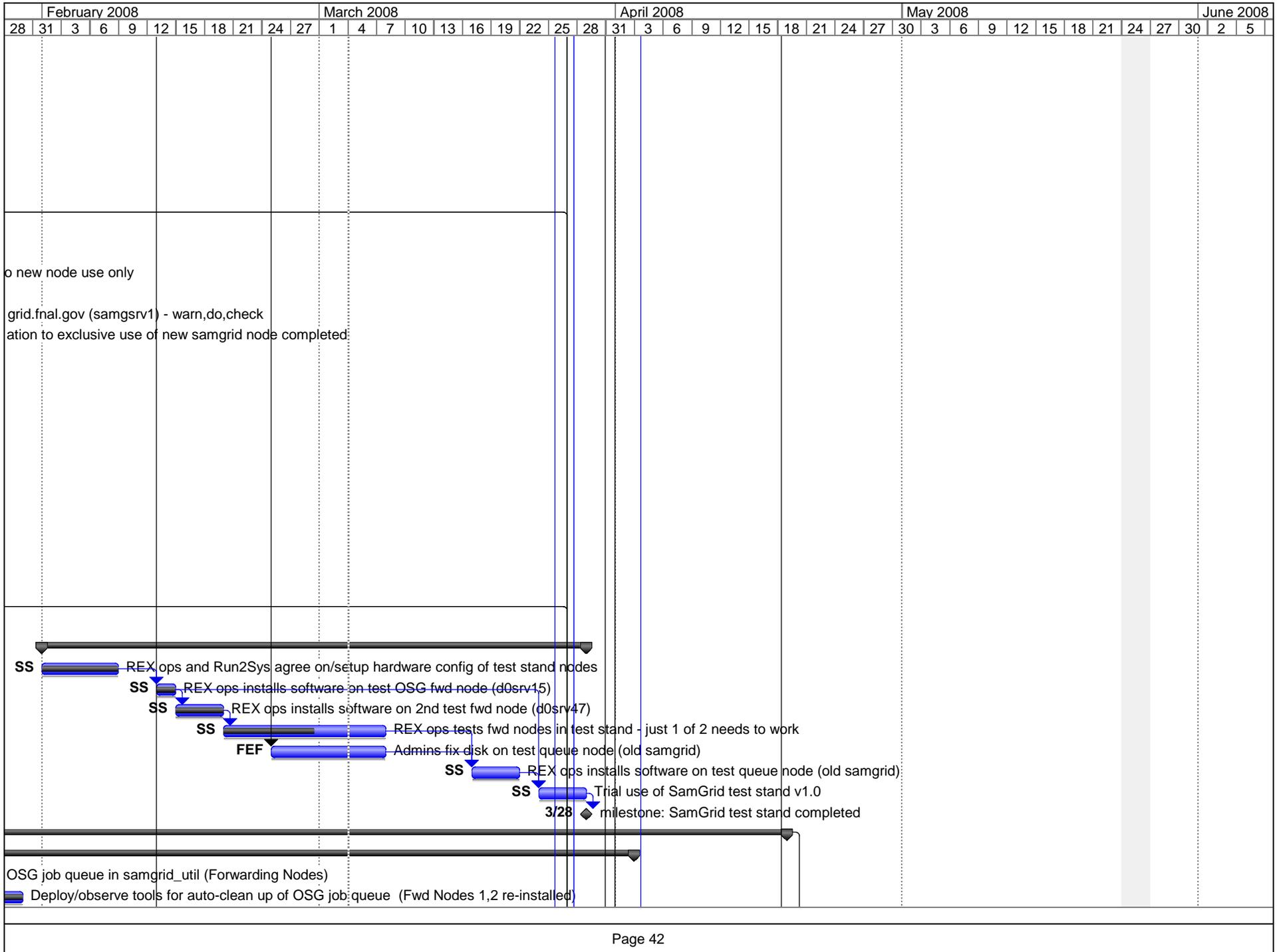
RDK

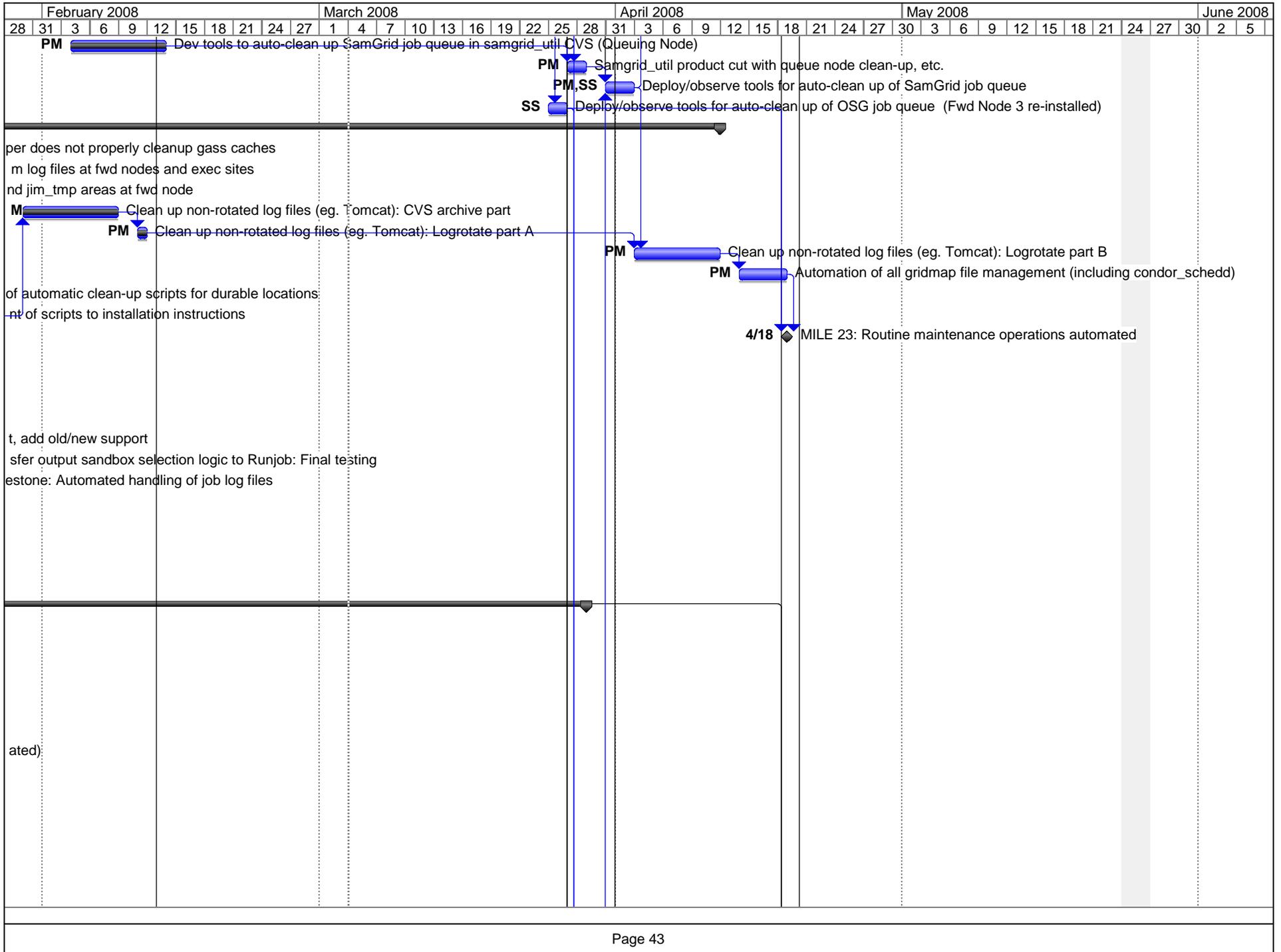


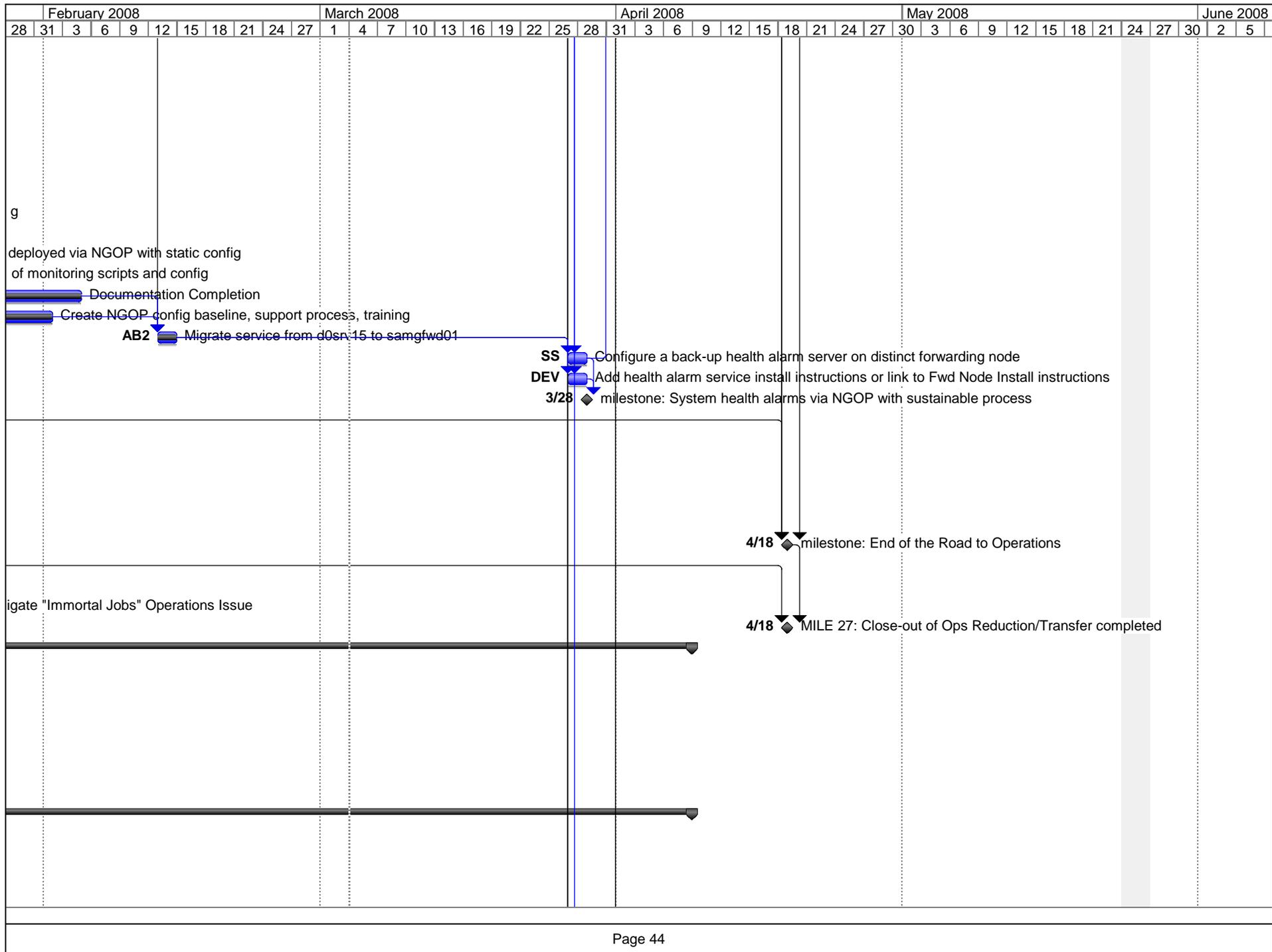


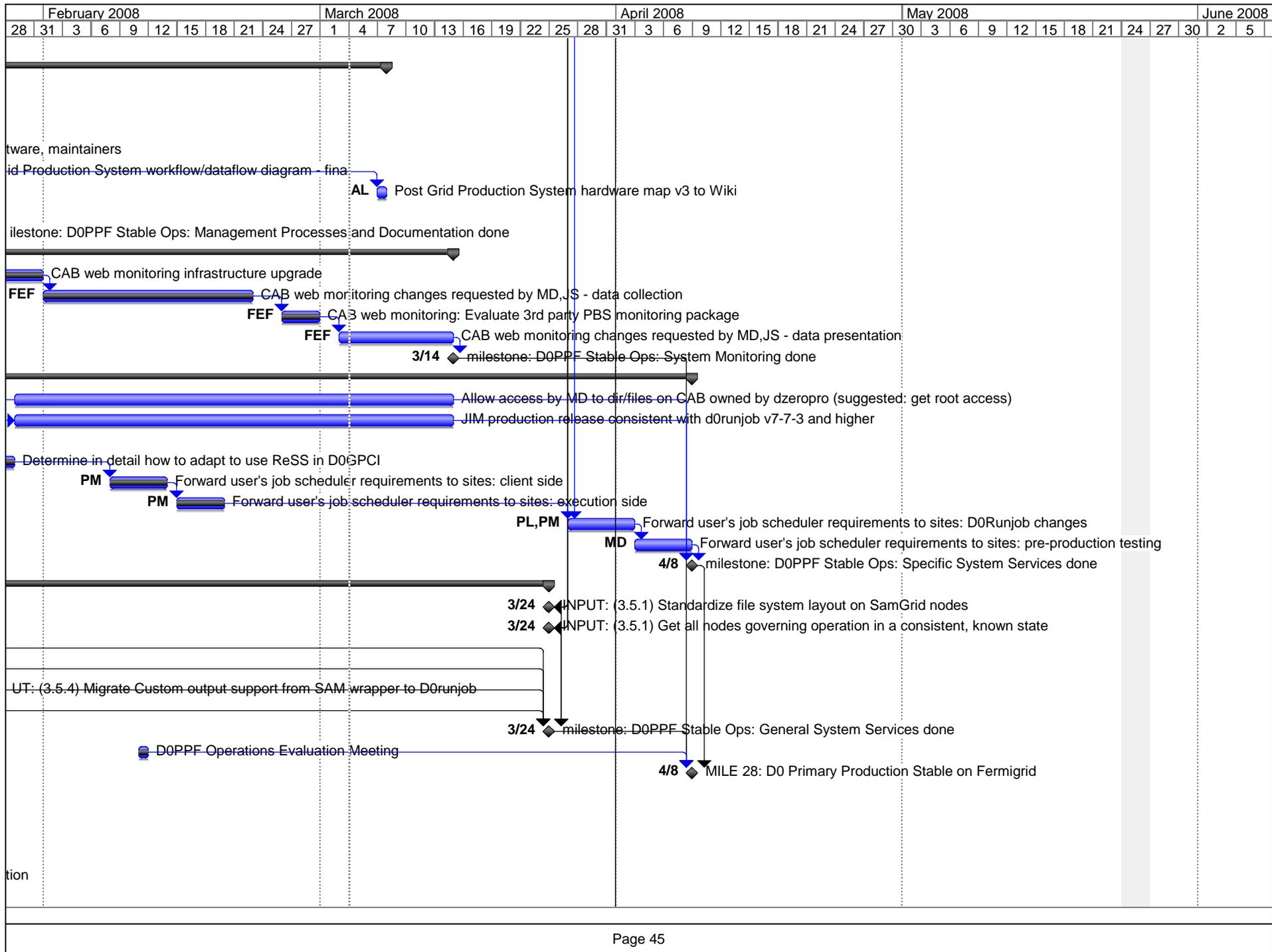


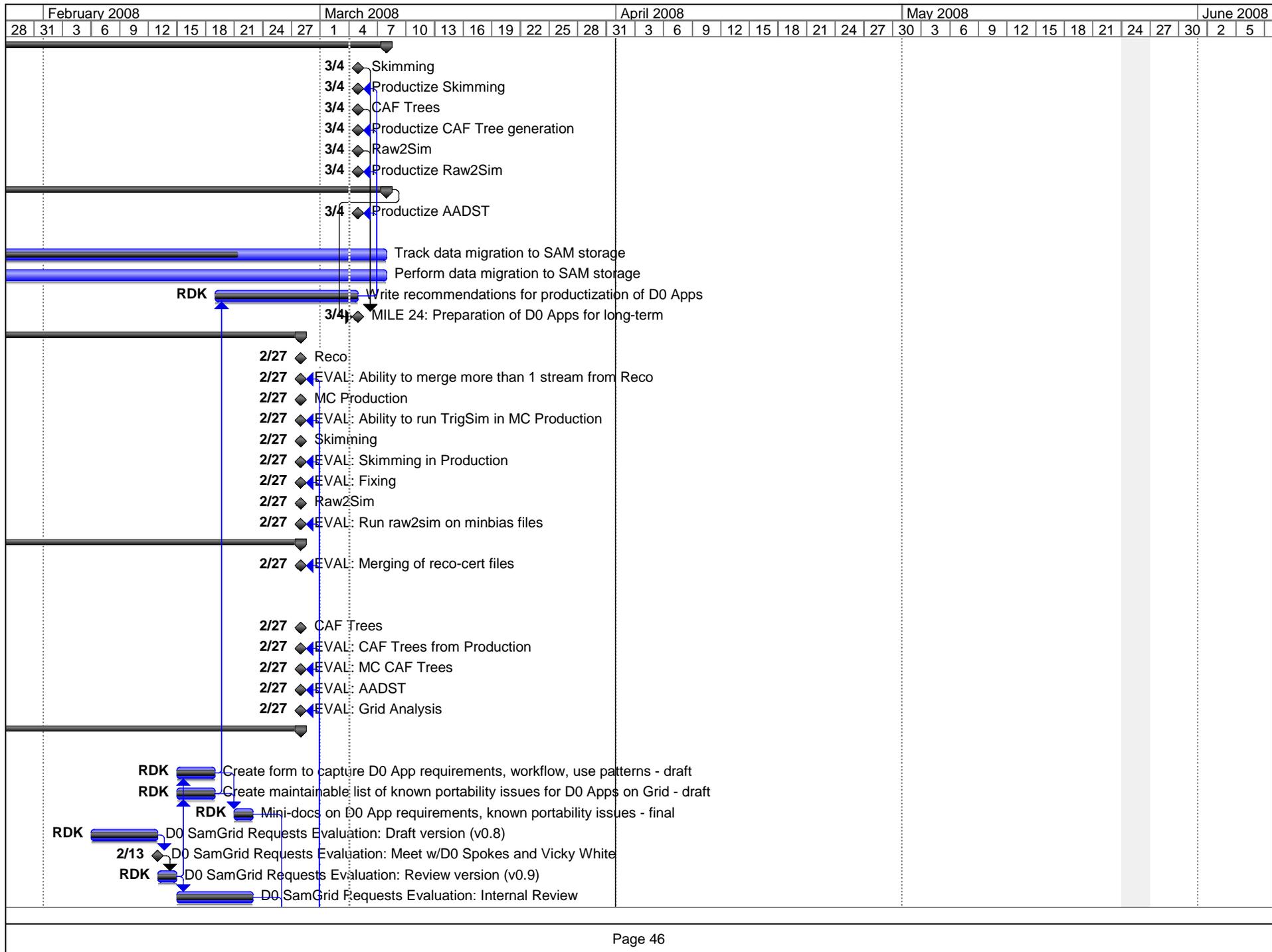


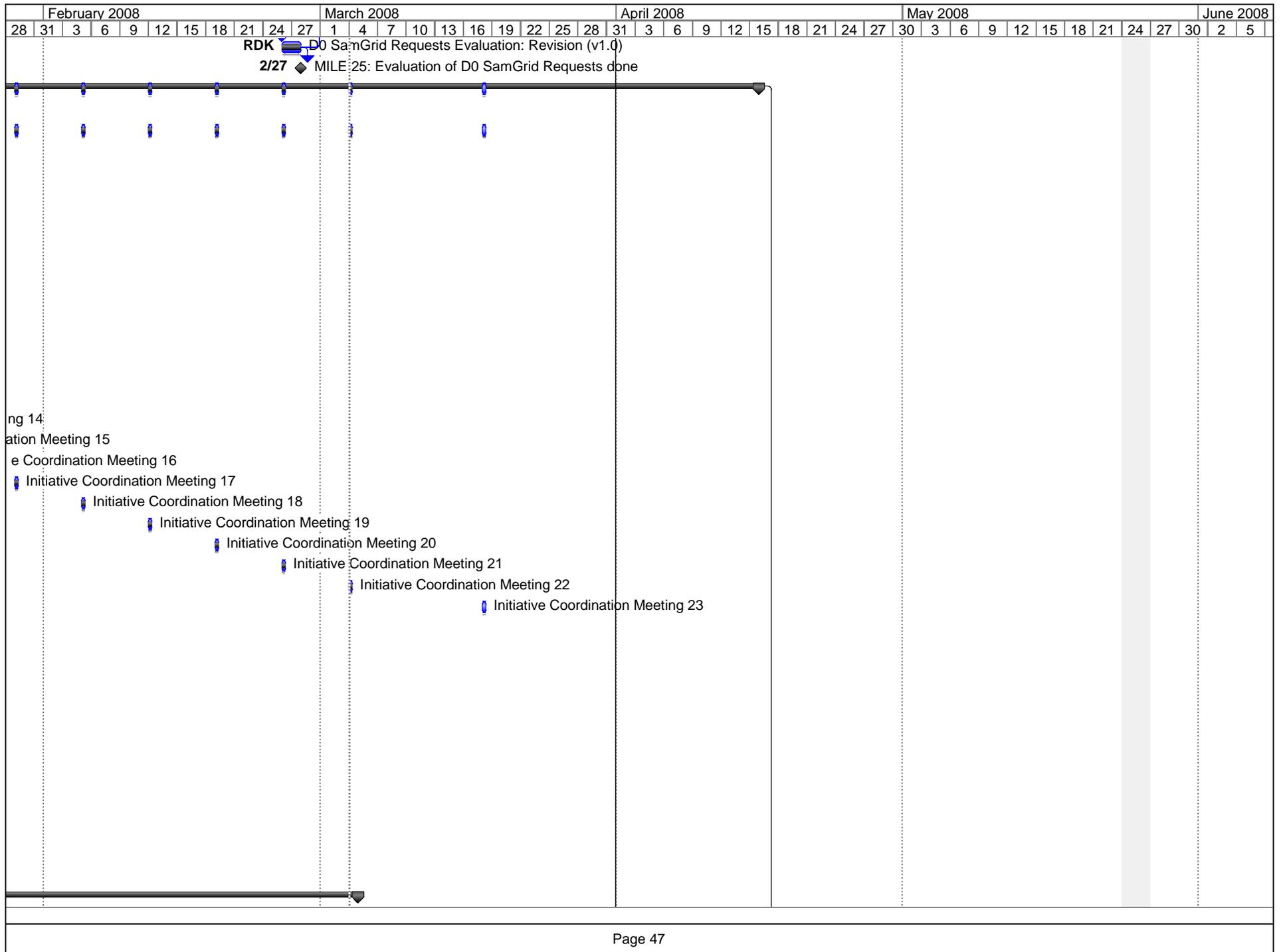


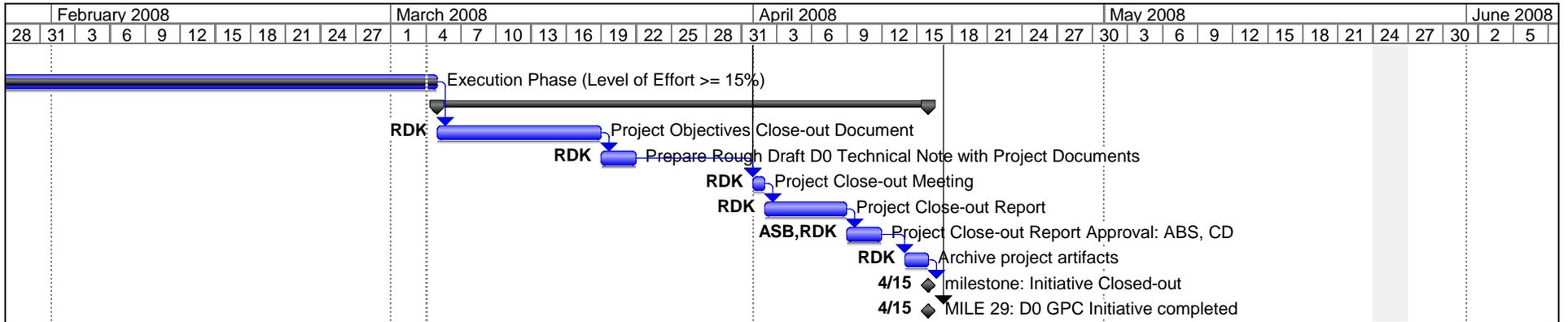












Project: D0 Grid Production Computin
Date: Tue 3/4/08

Task



Split



Progress



Milestone



Summary



Project Summary



External Tasks



External Milestone



Deadline

